A

EXHIBIT REDACTED IN ITS ENTIRETY

B

REQUEST FOR *EX PARTE* REEXAMINATION OF U.S. PATENT NO. 6,229,366

Attachment to Form PTO-1465
Providing Information about
Pat. No. 6,229,366
November 9, 2006
Express Mail No. [EV 859762256 US]

I. INTRODUCTION

Fairchild Semiconductor, Inc. ("Fairchild" or "Requester"), through these papers, requests that the Patent and Trademark Office grant this ex parte request to reexamine Claims 1, 2, 8, 9, 10, 14, 16, and 18 of U.S. Patent No. 6,229,366 ("the '366 patent") pursuant to the provisions of 35 U.S.C. §§ 302 et seq. and 37 C.F.R. § 1.510. A complete copy of the patent is enclosed as **Exhibit A**. A copy of the prosecution history of the '366 patent is attached as **Exhibit B**.

The inventors of the '366 patent were Balu Balakirshnan, Alex Djenguerian, and Leif Lund. The '366 patent matured from U.S. Patent Application No. 09/573,081 that is a divisional application of U.S. Pat. No. 6,107,851 ("the '851 patent"). **Exhibit C** is a copy of the '851 patent. A copy of the prosecution history of U.S. Patent Application No. 09/080,774 that matured into the '851 patent is attached as **Exhibit D**. The '366 patent and the '851 patent claim priority to the filing date of the '851 patent: May 18, 1998. The '366 patent is assigned to Power Integrations Inc.

Power Integrations sued Fairchild on October 20, 2004 for infringement of the '366 patent in the United States District Court for the District of Delaware (Civil Action No. 04-1371-JJF) ("the Litigation"). A claim construction order was entered on March 31, 2006. Three phrases relating to the scope of the '366 patent were construed by the Court. They are "soft-start circuit," "frequency variation circuit," and "frequency variation signal." The asserted claims have been narrowed to Claims 9 and 14 for the purpose of trial. The Litigation was bifurcated into an infringement / damages phase and an invalidity phase. The infringement / damages trial took place between October 2-6, 2006. The jury found that certain Fairchild products infringed Claims 9 and 14 of the '366 patent. The invalidity trial is scheduled to begin on December 4, 2006. A final judgment has not been entered and thus the case is not yet ripe for appeal.

The undersigned is counsel of record in that case and represents that he is authorized to act in a representative capacity for Fairchild Semiconductor, Inc. Requester provides the fee set in 37 CFR §1.20(c)(1) for reexamination herewith in the amount of $2,520.00 and the fee for submitting an Information Disclosure Statement of $180.00.

The undersigned certifies that a complete and entire copy of this Request for ex parte Reexamination and all supporting documents have been provided to the patent owner, Power Integrations, by serving Power Integrations' counsel of record in the Litigation at 225 Franklin Street, Boston, MA 02110-2804. The undersigned further certifies that an additional copy was served on BLAKELEY, SOKOLOFF, TAYLOR, ZAFMAN LLP., attorney of record for the '366 patent at 12400 Wilshire Boulevard, Seventh Floor, Los Angeles, CA 90025 as set forth in 37 CFR §1.33(c).

II. SUBSTANTIAL NEW QUESTION OF PATENTABILITY

Fairchild submits that a substantial question of patentability exists because the following patents and printed publications anticipate or render obvious, either alone or in combination with each other or with the prior art of record, Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 patent:

1. SGS-Thompson datasheet entitled "TEA2262, Switch Mode Power Supply Controller," pp. 1-9 (April 1996) ("TEA2262"). Attached to PTO Form 1449 as **Reference CA**.

2. R. Keller, "Power Integrations, Off-Line Power Integrated Circuit for International Rated 60-Watt Power Supplies," (February 23-27, 1992) ("Keller"). Attached to PTO Form 1449 as **Reference CB**.

3. U.S. Patent No. 4,638,417 ("Martin"). Attached to PTO Form 1449 as **Reference CC**.

4. "Programmed Pulsewidth Modulated Waveforms For Electromagnetic Interference Mitigation In DC-DC Converters", IEEE Transactions on Power Electronics, Vol. 8, No. 4 (October 1993) by A.C. Wang and S. R. Sanders ("Wang"). Attached to PTO Form 1449 as **Reference CD.**

5. Unitrode UCC 3800/1/2/3/4/5 biCMOS CURRENT MODE CONTROL IC's, (1994) ("U-133"). Attached to PTO Form 1449 as **Reference CE**.

These references were neither cited nor otherwise considered by the Examiner during the

original examination of the '366 patent.

A. **PROPOSED REJECTIONS**

Claims 1, 2, 8, 9, 10, 14, 16 and 18 are rejected under 35 U.S.C. §§102(a)(b) as anticipated by TEA2262.

Claims 1, 2, 8, 9, 10, 16 and 18 are rejected under 35 U.S.C. §§102(a)(b) as anticipated by Keller.

Claim 14 is rejected under 35 U.S.C. §103(a) as being unpatentable over Keller in view of Martin or, alternatively, in view of Wang.

Claims 1, 2, 8, 9, 10, 16, and 18 are rejected under 35 U.S.C. §§102(a)(b) as anticipated by U-133.

B. **THE TEA2262 DATASHEET RAISES A SUBSTANTIAL NEW QUESTION OF PATENTABILITY WITH RESPECT TO CLAIMS 1, 2, 8, 9, 10, 14, 16, AND 18**

The TEA2262 datasheet (attached to PTO 1449 as **Reference CA**) is dated April 1996 and is prior art under 35 U.S.C. § 102(a) and § 102(b). The TEA2262 datasheet describes a pulse width modulated switch that includes a frequency variation circuit providing a frequency variation signal, and an oscillator that provides an oscillation signal that varies within a frequency range according to the frequency variation signal. The same signal input is used to provide soft start. This teaching was not present during the prior examination of the '366 patent. Requestor believes that a reasonable examiner would consider this teaching important in determining whether or not the claims are patentable. Requestor respectfully submits that the TEA2262 datasheet anticipates Claims 1, 2, 8, 9, 10, 14, 16, and 18. For these reasons, the TEA 2262 datasheet raises a substantial new question of patentability with respect to each of Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 patent.

C. **KELLER RAISES A SUBSTANTIAL NEW QUESTION OF PATENTABILITY WITH RESPECT TO CLAIMS 1, 2, 8, 9, 10, 14, 16, AND 18**

Keller (attached to PTO 1449 as **Reference CB**) is dated February 1992 and is prior art

under 35 U.S.C. § 102(a) and § 102(b). Keller describes an integrated circuit that combines a MOSFET switch with a current programmed pulse width modulation control circuit that includes a soft start feature. Keller teaches a switching transistor wherein the switching transistor can be driven into a non-conducting state by a maximum duty cycle signal, a drive circuit, or a soft start circuit. This teaching was not present during the prior examination of the '366 patent. Requestor believes that a reasonable examiner would consider this teaching important in determining whether or not the claims are patentable. Requestor respectfully submits that Keller anticipates Claims 1, 2, 8, 9, 10, 16, and 18. Requestor further respectfully submits that Keller, in combination with either Martin or Wang, renders Claim 14 obvious. For these reasons, Keller raises a substantial new question of patentability with respect to each of Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 patent.

D. KELLER IN VIEW OF MARTIN RAISES A SUBSTANTIAL NEW QUESTION OF PATENTABILITY WITH RESPECT TO CLAIM 14

The Martin patent (attached to PTO 1449 as **Reference CC**) issued on January 20, 1987 and has a filing date of August 16, 1985. Martin, when combined with Keller, is prior art to the '366 patent under 35 U.S.C. § 103. Martin describes a frequency variation circuit that provides a frequency variation signal for varying the frequency of an oscillator as recited in Claim 14. This teaching was not present during the prior examination of the '366 patent. Requestor believes that a reasonable examiner would consider this teaching, important in determining whether or not Claim 14 is patentable. Requestor respectfully submits that Keller in view of Martin renders obvious Claim 14 of the '366 patent. For this reason, Keller in view of Martin raises a substantial new question of patentability with respect to at least Claim 14 of the '366 patent.

E. KELLER IN VIEW OF WANG RAISES A SUBSTANTIAL NEW QUESTION OF PATENTABILITY WITH RESPECT TO CLAIM 14

Wang (attached to PTO 1449 as **Reference CD**) was published in October of 1993 in the IEEE Trans Pwr. Elec. Journal. Wang, when combined with Keller, is prior art under 35 U.S.C. § 103. Wang describes the use of frequency variation via a digitally controlled analog

waveform in DC-DC power converters as recited in Claim 14. This teaching was not present during the prior examination of the '366 patent. Requestor believes that a reasonable examiner would consider this teaching, when combined with Keller, important in determining whether or not Claim 14 is patentable. Requestor respectfully submits that Keller, in view of Wang, renders obvious Claim 14 of the '366 patent. For this reason, Keller, in view of Wang, raises a substantial new question of patentability with respect to at least Claim 14 of the '366 patent.

F. **UNITRODE APPLICATION NOTE U-133 RAISES A SUBSTANTIAL NEW QUESTION OF PATENTABILITY WITH RESPECT TO CLAIMS 1, 2, 8, 9, 10, 16, AND 18**

The U-133 Application Note (attached to PTO 1449 as **Reference CE**) is a prior art reference that anticipates Claims 1, 2, 8, 9, 10, 16, and 18 of the '366 patent under 35 U.S.C. §§102(a) and (b). The U-133 Application Note was part of Unitrode Integrated Circuits' 1993-1994 Product & Application Handbook. The handbook was printed in June 1993 and is prior art to the '366 patent that has a priority date of May 18, 1998.

The U-133 Application Note anticipates at least Claims 1, 2, 8, 9, 10, 16, and 18. The U-133 Application Note establishes that the invention claimed in the '366 patent was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicants under 35 U.S.C. §102(a). The U-133 is also prior art under 35 U.S.C. §102(b) as it was published more than one year before the earliest priority date of the '366 patent, May 18, 1998.

The U-133 Application Note teaches a switching transistor wherein the switching transistor can be driven into a non-conducting state by a maximum duty cycle signal, a drive circuit, or a soft start circuit as recited in Claim 1. This teaching by U-133 was never cited or considered during the prosecution of the '366 patent. A reasonable examiner would consider this teaching important in determining whether or not the claims are patentable. The U-133 Application Note raises a substantial question of patentability with respect to at least Claim 1 of the '366 patent. MPEP §2242.

III. CLAIMS FOR WHICH REEXAM IS REQUESTED

Reexamination is requested of Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 patent in view of the TEA2262 Datasheet, Keller, Martin, Wang, and the U-133 Application Note. For the Examiner's convenience, Requester includes copies of the cited art, which are attached to PTO Form 1449.

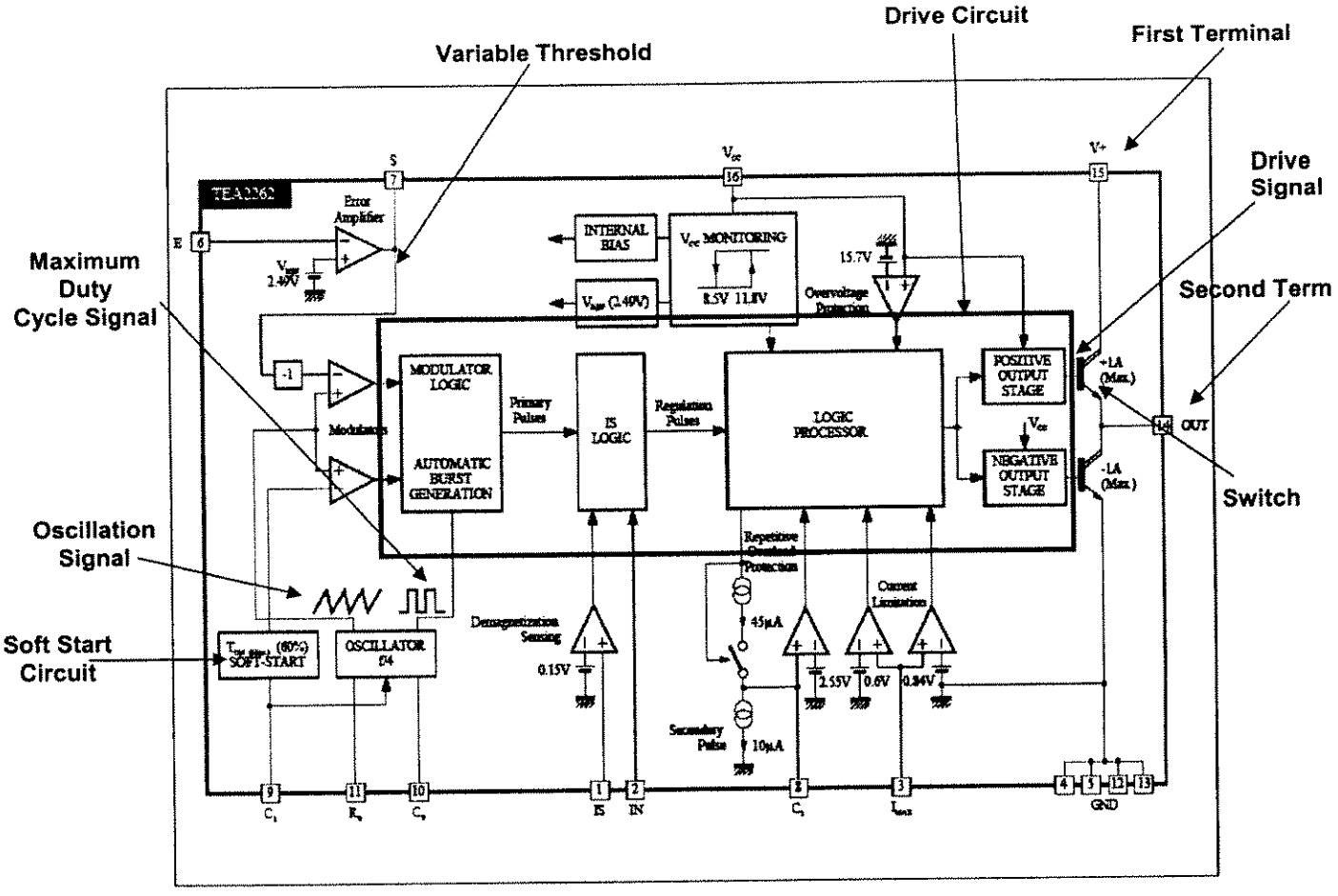
Requester sets forth below a chart comparing each element of Claims 1, 2, 8, 9, 10, 14, 16, and 18 with a corresponding disclosure from the TEA2262 Datasheet which plainly demonstrates that the TEA2262 anticipates Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 patent. Requester also sets forth below a chart comparing each element of Claims 1, 2, 8, 9, 10, 14, 16, and 18 with a corresponding disclosure from Keller which plainly demonstrates that Keller invalidates Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 patent. The chart shows that Claims 1, 2, 8, 9, 10, 16, and 18 are anticipated by Keller, while Claim 14 is rendered obvious by Keller in light of either Martin or Wang. Requester further sets forth below a chart comparing each element of Claims 1, 2, 8, 9, 10, 16, and 18 with a corresponding disclosure from the U-133 Application Note which plainly demonstrates that the U-133 anticipates Claims 1, 2, 8, 9, 10, 16, and 18 of the '366 patent.

IV. EXPLANATION OF PERTINENCE AND MANNER OF APPLYING CITED PRIOR ART TO EVERY CLAIM FOR WHICH REEXAMINATION IS REQUESTED

The prior art submitted with this request invalidates Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 patent.

A. THE TEA2262 DATASHEET ANTICIPATES CLAIMS 1, 2, 8, 9, 10, 14, 16, and 18 OF THE '366 PATENT

TEA2262 describes a monolithic integrated circuit for the use in primary part of an off-line switching mode power supply. The circuit is shown on p. 2 of the TEA2262 datasheet.

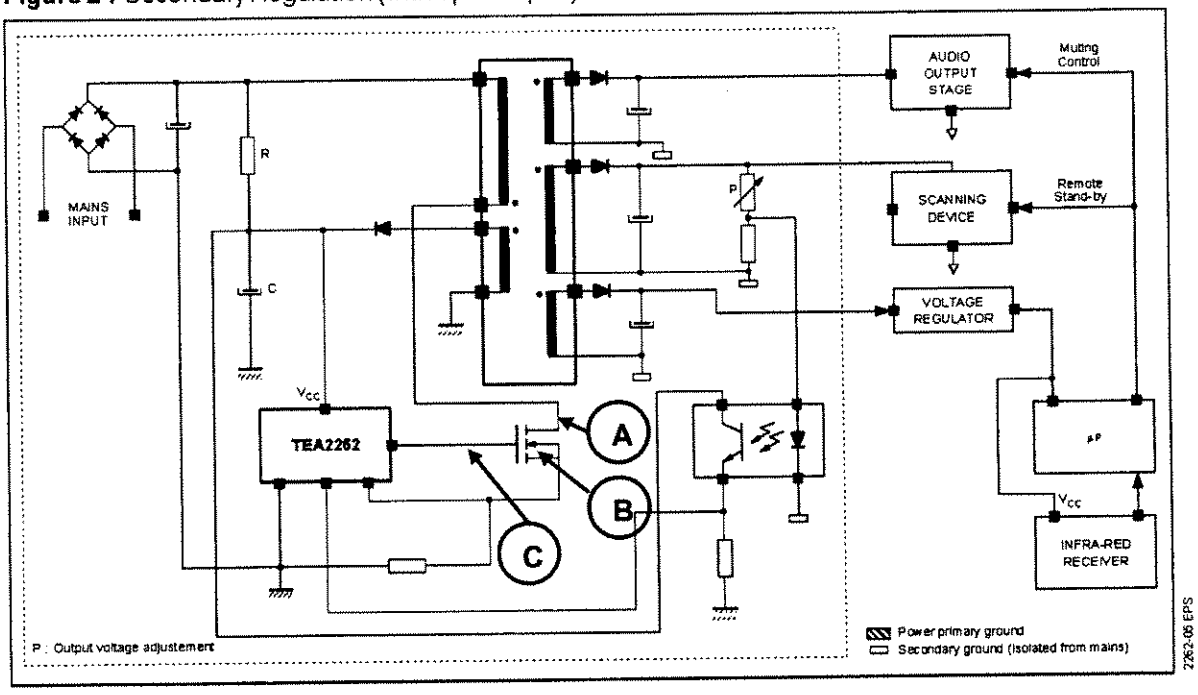


TEA2262 datasheet, Block Diagram

TEA2262 discloses a pulse width modulated switch having a first terminal (15), a second terminal (14), an oscillator providing a maximum duty cycle, a drive circuit that provides a drive signal, and a soft start circuit. The same input signal on pin 9 (C1) is used for both soft-start and to provide frequency variation.

The TEA2262 datasheet includes application diagrams, such as the secondary regulation circuit with optocoupler below:

Figure 2 : Secondary Regulation (with optocoupler)

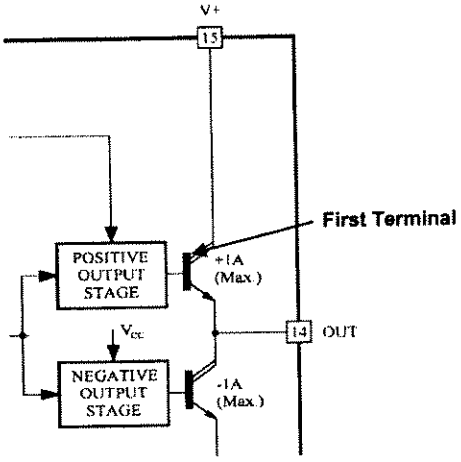
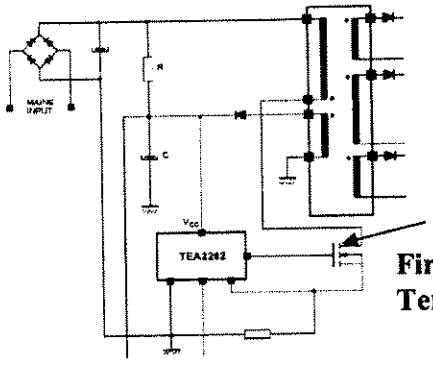


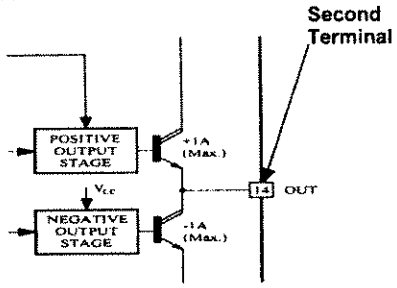
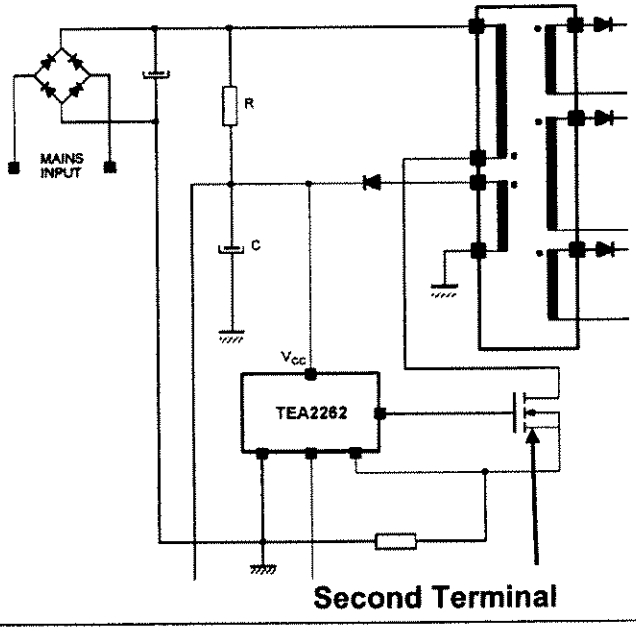
The TEA2262 secondary regulation circuit discloses a pulse width modulated switch having a first terminal (A), a second terminal (B), an oscillator providing a maximum duty cycle, a drive circuit that provides a drive signal, (C) and a soft start circuit.

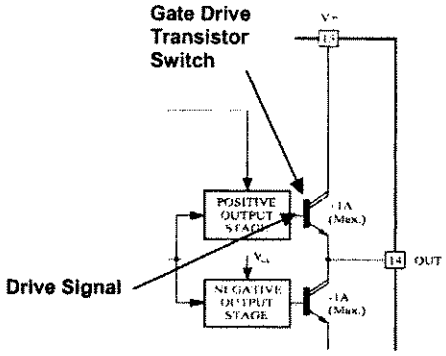
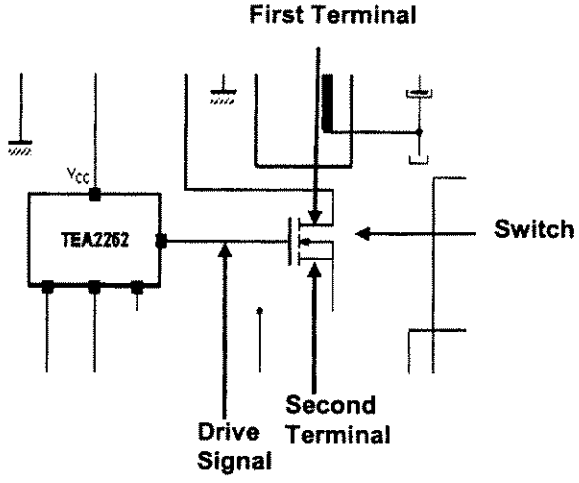
1. Claim 1

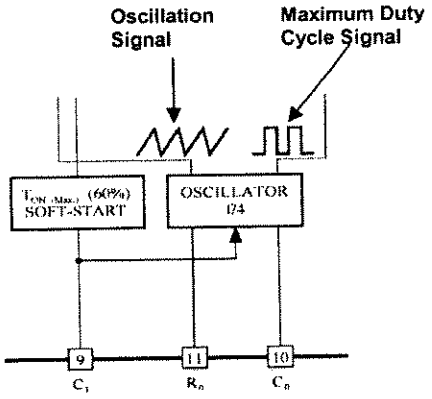
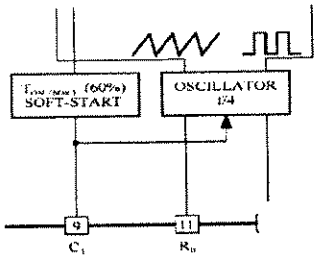
Both the block diagram of the TEA2262 datasheet and the secondary regulation configuration anticipate independent Claim 1. As detailed in the table below, TEA2262 discloses each and every limitation of Claim 1 anticipating Claim 1 under 35 U.S.C. §102 (a) and (b).

U.S. Patent No. 6,229,366	Anticipated or Rendered Obvious by SGS-Thomson TEA 2262 ("TEA2262")
1. A pulse width modulated switch comprising:	TEA2262 datasheet p. 1: The TEA2262 is a switch mode power supply controller using a PWM generator. Two embodiments of the TEA2262 anticipate the claims of the '366 patent.

U.S. Patent No. 6,229,366	Anticipated or Rendered Obvious by SGS-Thomson TEA 2262 ("TEA2262")
a first terminal;	In the first embodiment: TEA2262 datasheet p. 2, Block Diagram: The TEA2262 switch has a first terminal, V+, shown as pin 15.  In the second embodiment: TEA2262 datasheet p. 5, Figure 2: The first terminal is the terminal of the external transistor connected to one terminal of the primary winding of the transformer. 
a second terminal;	In the first embodiment: TEA2262 datasheet p. 2, Block Diagram: The TEA2262 switch has a second terminal, OUT, shown as pin 14.

U.S. Patent No. 6,229,366	Anticipated or Rendered Obvious by SGS-Thomson TEA 2262 ("TEA2262")
	 In the second embodiment: TEA2262 datasheet p. 5, Figure 2: The second terminal is the terminal of the external transistor connected to ground through a sense resistor. 
a switch comprising a control input, said switch allowing a signal to be transmitted between said first terminal and said second terminal according to a drive signal provided at said control input;	In the first embodiment: TEA2262 datasheet p. 2, Block Diagram: The TEA2262 includes a switch, i.e., a gate drive transistor switch, which has a control input (from a positive output stage). The gate drive transistor switch allows a signal to be transmitted between the first terminal, V+, and the second terminal, OUT, according to a drive signal provided at the control input from the positive output stage.

U.S. Patent No. 6,229,366	Anticipated or Rendered Obvious by SGS-Thomson TEA 2262 ("TEA2262")
	 In the second embodiment: TEA2262 datasheet p. 5, Figure 2: The TEA2262 is connected to a switch comprising a control input, the switch allowing a signal to be transmitted between the first terminal and the second terminal according to a drive signal provided at said control input. 
an oscillator that provides a maximum duty cycle signal comprising an on-state and an off-state;	In both embodiments: TEA2262 datasheet p. 2, Block Diagram: The TEA2262 switch includes an oscillator, which provides a maximum duty cycle signal, i.e., a pulse signal, comprising an on-state and an off-state. This oscillator provides an oscillation signal that varies with respect to the voltage on pin 9.

U.S. Patent No. 6,229,366	Anticipated or Rendered Obvious by SGS-Thomson TEA 2262 ("TEA2262")
	
a drive circuit that provides said drive signal according to said maximum duty cycle signal; and	In both embodiments: The TEA2262 includes a drive circuit and drive signal as labeled on the block diagram included above on page 7. TEA2262 datasheet p. 2, Block Diagram. The drive circuit provides the drive signal according to the maximum duty cycle signal shown on the diagram as the square wave out of the oscillator. TEA2262 datasheet p. 2, Block Diagram.
a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle.	In both embodiments, a soft-start circuit is provided that instructs the drive circuit to disable the drive signal during at least a portion of the on-state of the maximum duty cycle.  The soft-start circuit disclosed in the block diagram on p. 2 appears to read on the structures disclosed by the '366 patent. Capacitor C1 provides a low frequency ramp signal that is compared with a higher frequency sawtooth waveform from the oscillator to disable the drive signal dduring at least a portion of the on-state of the maximum duty cycle signal from the oscillator.

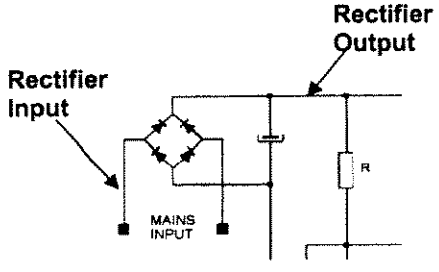
2. Claim 2

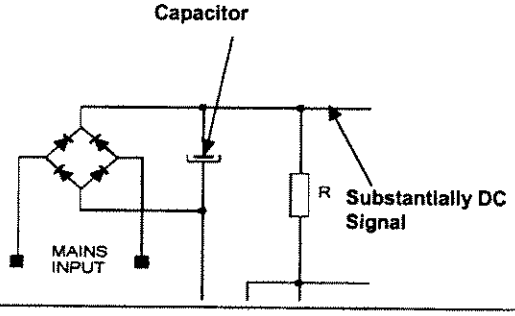
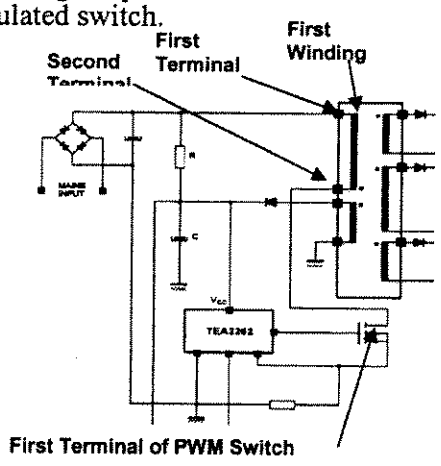
Dependent Claim 2 adds to Claim 1 the limitation that the device of Claim 1 is a monolithic device. TEA2262 teaches this additional limitation. Also, as established above, TEA2262 anticipates Claim 1. Because Claim 2 depends on Claim 1, all limitations of Claim 1 incorporated into Claim 2 are anticipated. As detailed in the table below, TEA2262 discloses each and every limitation of Claim 2 and; accordingly, anticipates Claim 2 under 35 U.S.C. §102(a) and (b).

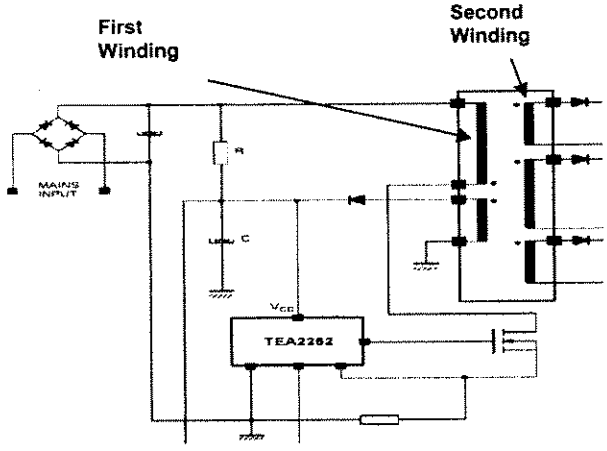
2. The pulse width modulated switch of claim 1 wherein said first terminal, said second terminal, said switch, said oscillator, said drive circuit and said soft start circuit comprise a monolithic device.	As page one of the data sheet indicates "the TEA2262 is a monolithic integrated circuit." The Block Diagram shows that the switch, terminals, oscillator, drive circuit and soft start circuit are all included in the TEA2262 circuit. *See* TEA2262 datasheet, p. 2, Block Diagram (shown above on page 7, with elements labeled).

3. Claim 8

Dependent Claim 8 adds to Claim 1 the limitation of a line-powered unregulated DC supply, and a transformer whose primary is powered by the DC and switched by the switch element of Claim 1, and whose secondary can be coupled to a load. TEA2262 teaches this. As established above, TEA2262 anticipates Claim 1. Because Claim 8 depends on Claim 1, all limitations of Claim 1 incorporated into Claim 8 are anticipated. As detailed in the table below, TEA2262 discloses each and every limitation of Claim 8 and; accordingly anticipates Claim 2 under 35 U.S.C. §102(a) and (b).

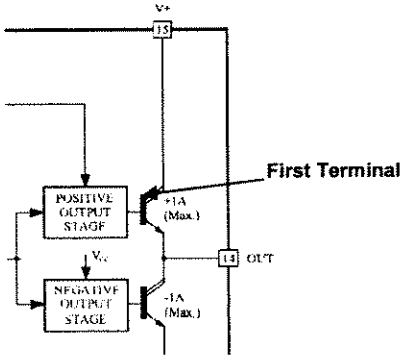
8. The pulse width modulated switch of claim 1 further comprising a rectifier input and a rectifier output, said rectifier input receiving an AC mains signal and said rectifier output providing a rectifier signal;	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a rectifier comprising an input and an output with the input receiving an AC mains signal and the output providing a rectified signal. 

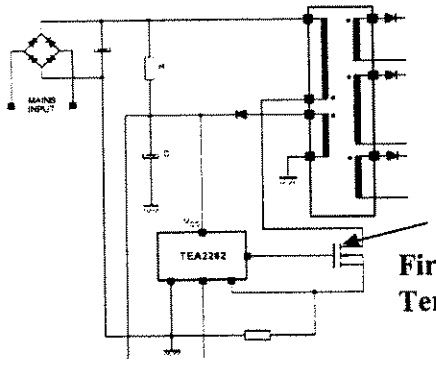
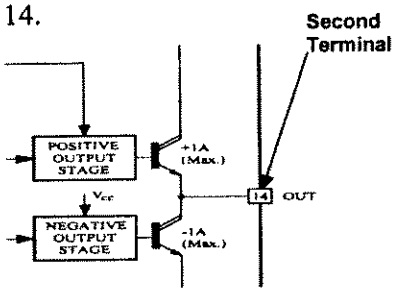
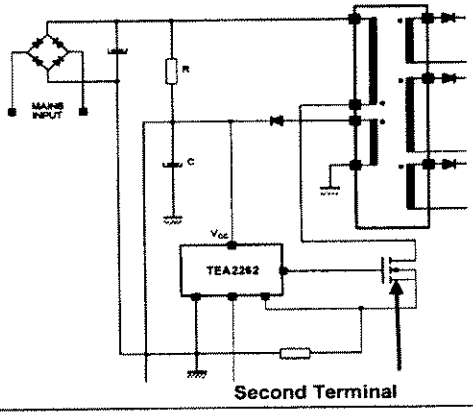
a power supply capacitor that receives said rectified signal;	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a power supply capacitor that receives the rectified signal from the rectifier and provides a substantially DC signal. 
a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said pulse width modulated switch; and	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a first winding having a first terminal and a second terminal. The first winding receives the substantially DC signal with the second terminal of the first winding coupled to the first terminal of the pulse modulated switch. 
a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load.	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a second winding magnetically coupled to the first winding.

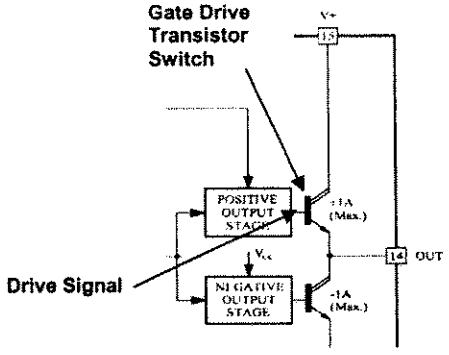
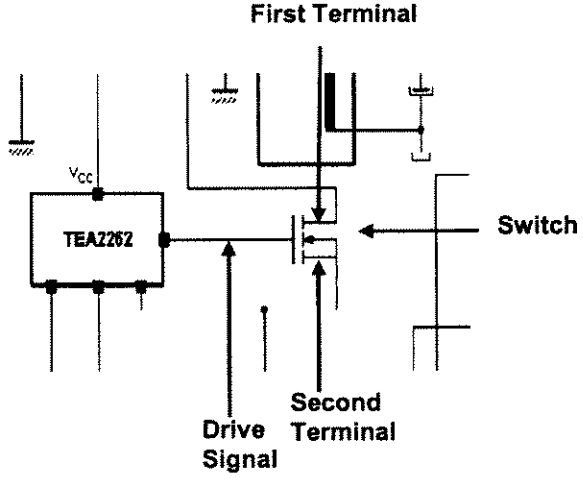
	

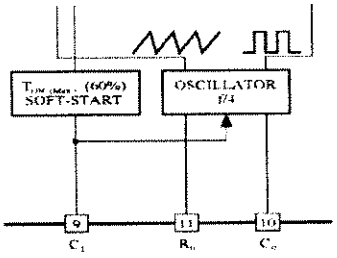
4. Claim 9

As established above, TEA2262 anticipates Claim 1. Because Claim 9 contains substantially the same limitations as Claim 1, all limitations of Claim 9 are anticipated for the reasons provided above. As detailed in the table below, TEA2262 discloses each and every limitation of Claim 9, and, accordingly anticipates Claim 9 under 35 U.S.C. §§102(a) and (b).

A regulation circuit comprising a first terminal;	TEA2262 datasheet pp. 2 and 5: The TEA2262 is a switch mode power supply controller. Two embodiments of the TEA2262 anticipate the claims of the '366 patent. In the first embodiment: TEA2262 datasheet p. 2, Block Diagram: The TEA2262 switch has a first terminal, V+, shown as pin 15.  In the second embodiment: TEA2262 datasheet p. 5, Figure 2: The first terminal

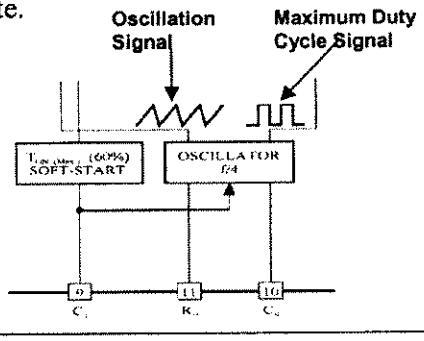
	is the terminal of the external transistor connected to one terminal of the primary winding of the transformer. 
a second terminal;	In the first embodiment: TEA2262 datasheet p. 2, Block Diagram: The TEA2262 switch has a second terminal, OUT, shown as pin 14.  In the second embodiment: TEA2262 datasheet p. 5, Figure 2: The second terminal is the terminal of the external transistor connected to ground through a sense resistor. 
a switch comprising a control input, said switch allowing a signal to be transmitted between said first terminal and said second	In the first embodiment: TEA2262 datasheet p. 2, Block Diagram: The

terminal according to a drive signal provided at said control input;	TEA2262 includes a switch, i.e., a gate drive transistor switch, which has a control input (from a positive output stage). The gate drive transistor switch allows a signal to be transmitted between the first terminal, V+, and the second terminal, OUT, according to a drive signal provided at the control input from the positive output stage.  In the second embodiment: TEA2262 datasheet p. 5, Figure 2: The TEA2262 is connected to a switch comprising a control input, the switch allowing a signal to be transmitted between the first terminal and the second terminal according to a drive signal provided at said control input. 
a drive circuit that provides said drive signal for a maximum time period of a cycle; and	In both embodiments: The TEA2262 includes a drive circuit and drive signal as labeled on the block diagram included above on page 7. TEA2262 datasheet p. 2, Block Diagram. The drive circuit provides the drive signal according to the maximum duty cycle signal shown on the diagram as the square wave out of the oscillator. TEA2262 datasheet p. 2, Block Diagram.

a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said maximum time period.	In both embodiments a soft-start circuit is provided that instructs the drive signal to disable the drive signal during at least a portion of the on-state of the maximum duty cycle signal. TEA2262 datasheet p.2, block diagram:  The soft-start circuit disclosed in the block diagram on p. 2 appears to read on the structures disclosed by the '366 patent. Capacitor C1 provides a low frequency ramp signal that is compared with a higher frequency sawtooth waveform from the oscillator to disable the drive signal dduring at least a portion of the on-state of the maximum duty cycle signal from the oscillator.

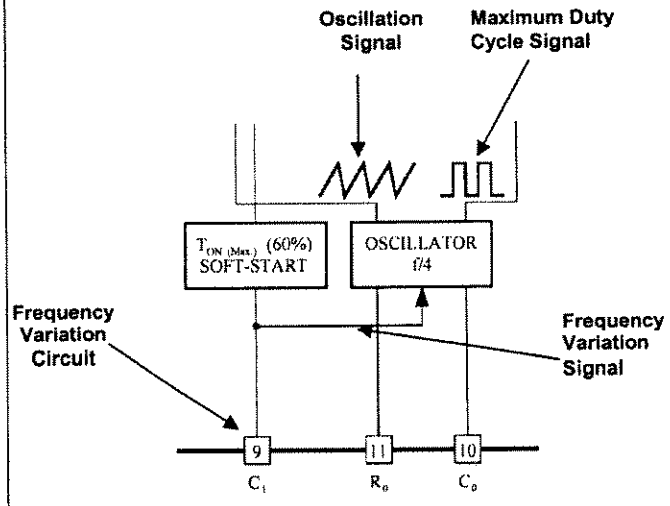
5. Claim 10

As established above, TEA2262 anticipates Claim 9. As Claim 10 depends on Claim 9, it is established that all limitations of Claim 9 incorporated into Claim 10 are anticipated. As detailed in the table below, TEA2262 discloses each and every limitation of Claim 10, so TEA2262 anticipates Claim 10 under 35 U.S.C. §102(a) and (b).

10. The regulation circuit of claim 9 further comprising an oscillator that provides a maximum duty cycle signal to said drive circuit, said maximum duty cycle signal comprising an on-state for said maximum time period.	In both embodiments: TEA2262 datasheet p. 2, Block Diagram: The TEA2262 switch includes an oscillator, which provides a maximum duty cycle signal, i.e., a pulse signal, comprising an on-state and an off-state. 

6. Claim 14

TEA2262 anticipates Claim 14. TEA2262 discloses a pulse width modulated MOSFET switch with soft-start and frequency variation functionality. As established above, TEA2262 anticipates Claim 9. As Claim 14 depends on Claim 9, it is established that all limitations of Claim 9 incorporated into Claim 14 are anticipated. As detailed in the table below, TEA2262 discloses each and every limitation of Claim 14, so TEA2262 anticipates Claim 14 under 35 U.S.C. §102.

14. The regulation circuit of claim 9 further comprising a frequency variation circuit that provides a frequency variation signal and wherein said maximum time period varies according to a magnitude of said frequency variation signal.	In both embodiments: TEA2262 datasheet p.2, block diagram: The soft-start circuit and capacitor on pin 9 (C1) is a frequency variation circuit that provides a frequency variation signal to the oscillator.  In particular, at start up, the frequency is divided by 4 (f/4). When the voltage across soft-start capacitor C1 reaches 2.5V, the frequency returns to its normal value, f. See p. 3 of TEA 2262 datasheet (C1 is soft-start capacitor); p. 6 ("During starting phase, in order to avoid transformer magnetization (especially at high frequency), the frequency oscillator is divided by four. At switch-on, C_o charging current is divided by four. It recover [sic] its normal value when the voltage on soft-start capacitor reach [sic] 2.5 V.") As shown in the block diagram, the frequency variation signal is internal. It varies cyclically in magnitude during burst mode. *See* TEA 2262 datasheet p.2, (block diagram) and p. 6, and

	associated application note AN376, p. 13. As described in AN376, the burst mode of TEA 2262 is cyclic. Bursts are generated with a period that varies based on output power. AN376, p.2 (§ 1.2), p.3, Figure 2 (showing a typical burst period of 30 ms). Soft-start is repeated at the beginning of each burst. AN 376, p. 13. The variation of frequency between f/4 and f, which depends upon the discharging of soft-start capacitor C1, likewise repeats with each burst. TEA 2262 datasheet p. 5. The frequency variation signal modulates the frequency of the oscillation signal within a predetermined range of the oscillator's typical operating frequency (f) and 25% of its typical operating frequency (f/4). *See* TEA2262 datasheet p. 2, (block diagram) and p. 6.

7. Claim 16

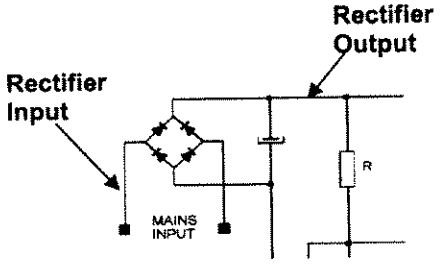
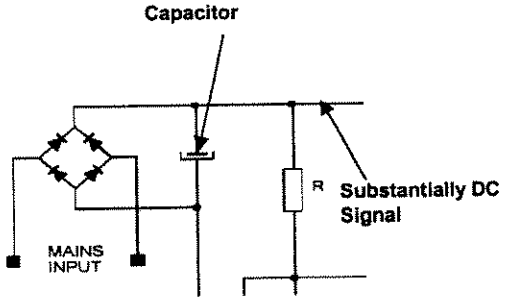
As established above, TEA2262 anticipates Claim 9. Because Claim 14 depends on Claim 9, all limitations of Claim 9 incorporated into Claim 16 are anticipated. As detailed in the table below, TEA2262 discloses each and every limitation of Claim 16 and; accordingly, anticipates Claim 16 under 35 U.S.C. §102(a) and (b). Furthermore, Claim 16 is invalid under 35 U.S.C. §112 ¶ 1 as indefinite for failing to particularly point out the claimed invention. The term "oscillator" lacks proper antecedent basis.

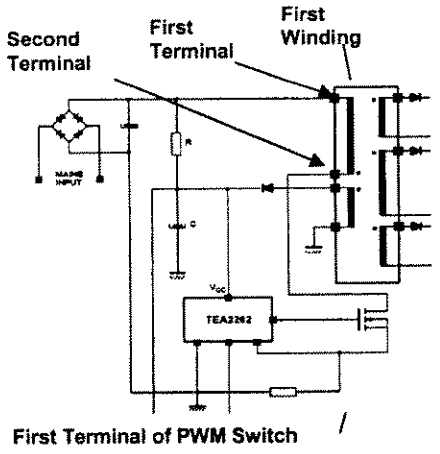
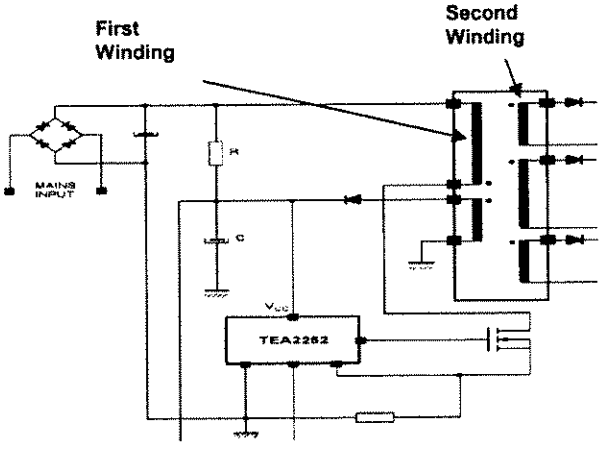
U.S. Patent No. 6,229,366	TEA2262
16. The regulation circuit of claim 9 wherein said first terminal, said second terminal, said oscillator and said soft start circuit comprise a monolithic device.	As page one of the data sheet indicates "the TEA2262 is a monolithic integrated circuit." The Block Diagram shows that the switch, terminals, oscillator, drive circuit and soft start circuit are all included in the TEA2262 circuit. *See* TEA2262 datasheet, p. 2, Block Diagram (shown above on page 7, with elements labeled).

8. Claim 18

As established above, TEA2262 anticipates Claim 9. Because Claim 18 depends on Claim 9, all limitations of Claim 9 incorporated into Claim 18 are anticipated. As detailed in the table

below, TEA2262 discloses each and every limitation of Claim 18 and; accordingly, anticipates Claim 18 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	TEA2262
18. The regulation circuit of claim 9 further comprising	
a rectifier input and a rectifier output, said rectifier input receiving an AC mains signal and said rectifier output providing a rectifier signal;	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a rectifier comprising an input and an output with the input receiving an AC mains signal and the output providing a rectified signal. 
a power supply capacitor that receives said rectified signal;	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a power supply capacitor that receives the rectified signal from the rectifier and provides a substantially DC signal. 
a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said regulation circuit; and	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a first winding having a first terminal and a second terminal. The first winding receives the substantially DC signal with the second terminal of the first winding coupled to the first terminal of the pulse modulated switch.

U.S. Patent No. 6,229,366	TEA2262
	
a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load.	TEA2262 datasheet p. 5, Figure 2: The TEA2262 discloses a second winding magnetically coupled to the first winding. 

B. KELLER, EITHER ALONE OR IN COMBINATION WITH MARTIN OR WANG, INVALIDATES CLAIMS 1, 2, 8, 9, 10, 14, 16, AND 18 OF THE '366 PATENT

Keller describes a high-speed power MOSFET switch with a current programmed pulse width modulation control circuit. The circuit is shown in Figure 1 of Keller.

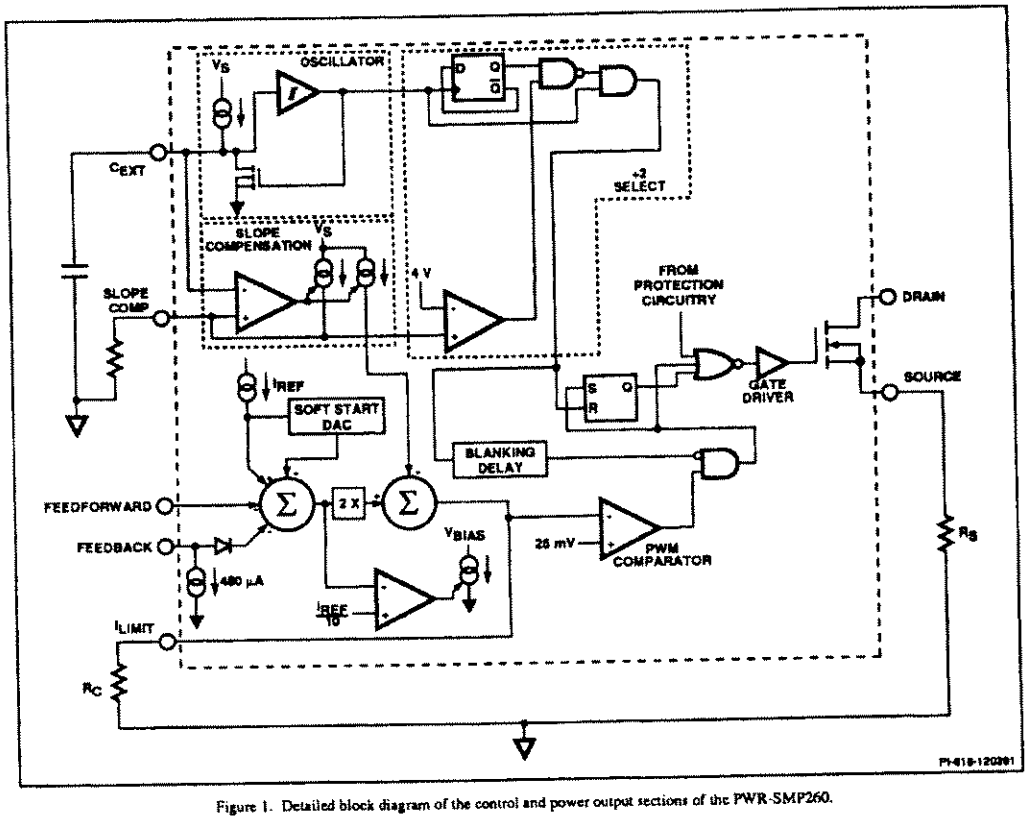


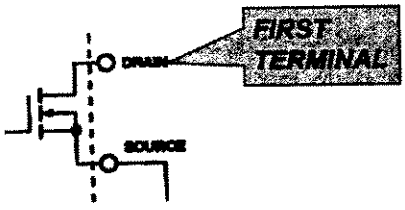
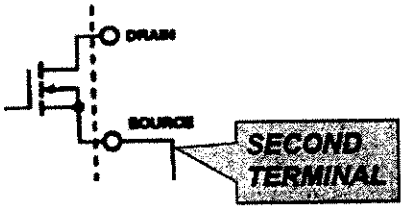
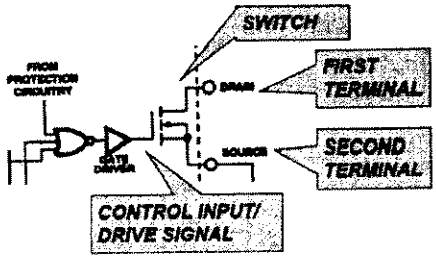
Figure 1. Detailed block diagram of the control and power output sections of the PWR-SMP260.

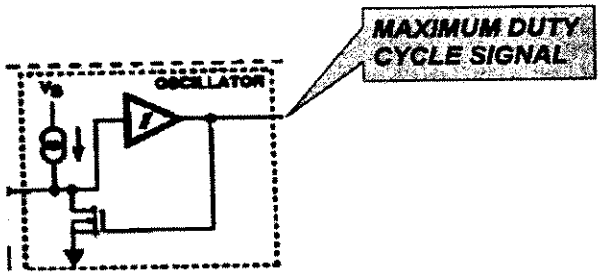
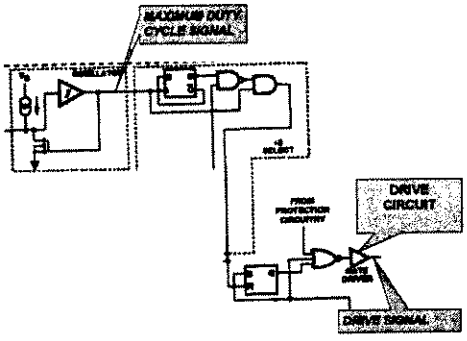
Keller, Figure 1.

Keller discloses the use of a maximum duty cycle signal. ("Maximum Duty Cycle: The maximum duty cycle is user programmable." P. 508.) Keller further discloses a soft start circuit feature for use at power up. (Soft Start: During power up the circuit has an optional soft start function." P. 510.) The soft start circuit is shown in Figure 1 as "Soft Start DAC."

9. Claim 1

Claim 1 is an independent claim that Keller anticipates. As detailed in the table below, Keller discloses each and every limitation of Claim 1 anticipating Claim 1 under 35 U.S.C. §102 (a) and (b).

U.S. Patent No. 6,229,366	Keller
1. A pulse width modulated switch comprising	
A first terminal;	As shown in Figure 1, Keller teaches a first terminal **(Drain)**. 
a second terminal;	As shown in Figures 1, Keller teaches a second terminal **(Source)**. 
a switch comprising a C, the switch allowing a signal to be transmitted between said first terminal and said second terminal according to a drive signal provided at said control input;	As shown in Figure 1, Keller teaches a switch comprising a control input, the switch allowing a signal to be transmitted between the first terminal **(Drain)** and the second terminal **(Source)** according to a drive signal provided at said control input. 

U.S. Patent No. 6,229,366	Keller
an oscillator that provides a maximum duty cycle signal comprising an on-state and an off-state;	As shown in Figure 1, Keller teaches an oscillator that provides a maximum duty cycle signal comprising an on-state and an off-state. *See* p. 508 ("The maximum duty cycle is user programmable."); *see also*, p. 509. 
a drive circuit that provides said drive signal according to said maximum duty cycle signal; and	As shown in Figure 1, Keller teaches a drive circuit that provides the drive signal according to the maximum duty cycle signal. The drive circuit consists of a gate driver. 
a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle.	As shown in Figure 1, Keller teaches a soft start circuit that provides a signal instructing the drive circuit to disable the drive signal during at least a portion of the on-state of the maximum duty cycle. "During power up the circuit has an optional soft start function." P. 510. "When soft start is enabled the maximum output switch current is programmed linearly increasing from zero to maximum in 4096 power supply equivalent clock cycles." P. 510.

10. Claim 2

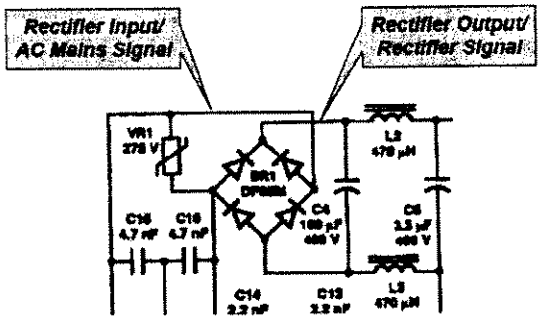
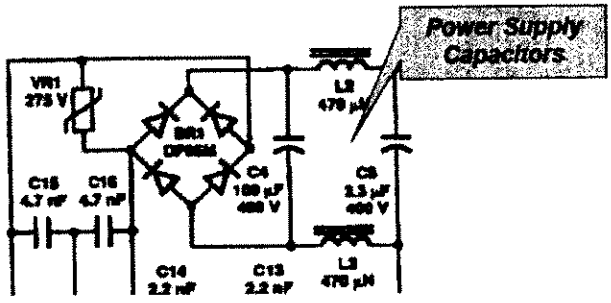
Dependent Claim 2 adds to Claim 1 the limitation that the device of Claim 1 is a monolithic device. As established above, Keller anticipates Claim 1. Because Claim 2 depends on Claim 1, all limitations of Claim 1 incorporated into Claim 2 are anticipated. As detailed in the table below, Keller discloses each and every limitation of Claim 2 and; accordingly, anticipates Claim 2 under 35 U.S.C. §102(a) and (b).

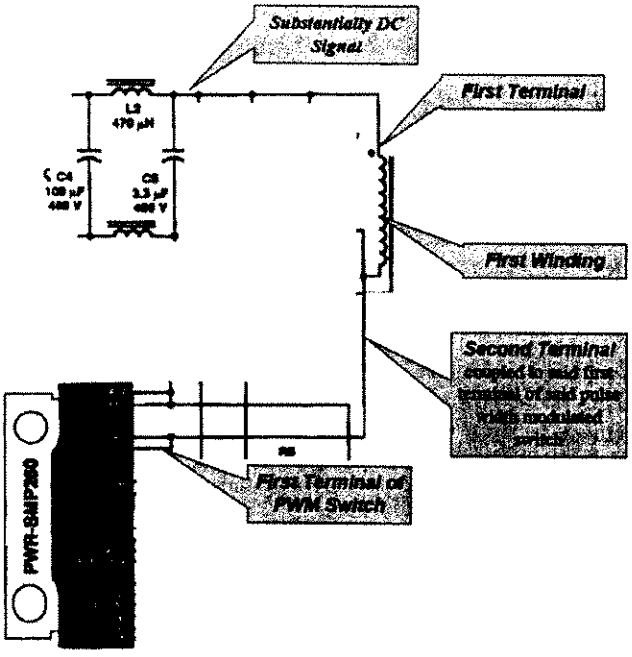
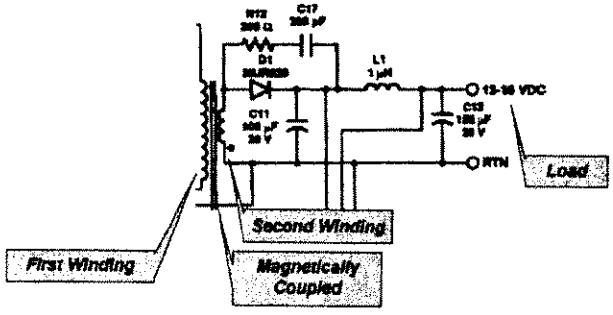
U.S. Patent No. 6,229,366	Keller
2. The pulse width modulated switch of claim 1 wherein said a first terminal, said second terminal, said switch, said oscillator, said drive circuit and said soft start circuit comprise a monolithic device.	As shown in Figures 1 and 11, Keller teaches that the first terminal, second terminal, switch, oscillator, drive circuit and soft start circuit comprise a monolithic device. *See also* Abstract, p. 505 (describing integration of control circuits with MOSFET switch).

11. Claim 8

Dependent Claim 8 adds to Claim 1 a line-powered unregulated DC supply, and a transformer whose primary is powered by the DC and switched by the switch element of Claim 1, and whose secondary can be coupled to a load. As established above, Keller anticipates Claim 1. Because Claim 8 depends on Claim 1, all limitations of Claim 1 incorporated into Claim 8 are anticipated. As detailed in the table below, Keller discloses each and every limitation of Claim 8 and; accordingly anticipates Claim 2 under 35 U.S.C. §102(a) and (b).

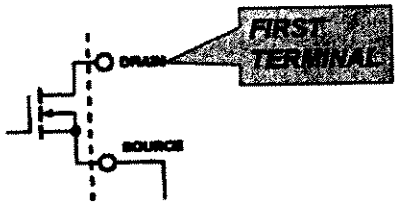
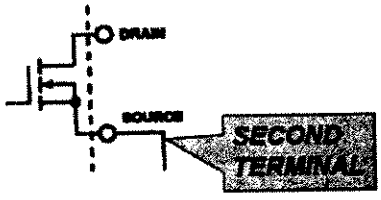
U.S. Patent No. 6,229,366	Keller
8. The pulse width modulated switch of claim 1 further comprising	
a rectifier input and a rectifier output, said rectifier input receiving an AC mains signal and said rectifier output providing a rectifier signal;	As shown in Figure 11, Keller teaches a rectifier (BR1) input and a rectifier output, the rectifier input receiving an AC mains signal and the rectifier output providing a rectifier signal.

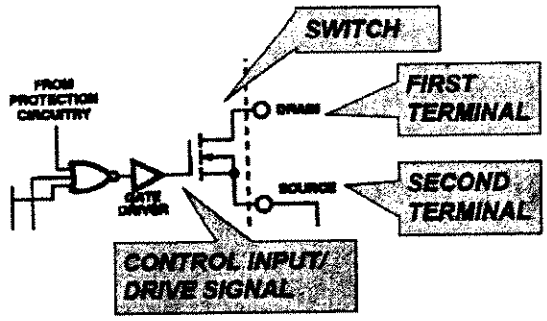
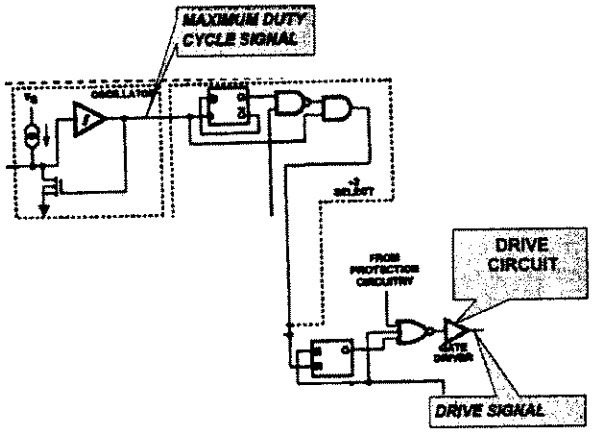
U.S. Patent No. 6,229,366	Keller
	
a power supply capacitor that receives said rectified signal;	As shown in Figure 11, Keller teaches a power supply capacitor (C4 and/or C5) that receives said rectified signal. 
a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said pulse width modulated switch; and	As shown in Figure 11, Keller teaches a first winding comprising a first terminal and a second terminal, the winding receiving a substantially DC signal from the power supply capacitor, the second terminal of said first winding coupled to the first terminal of said pulse width modulated switch.

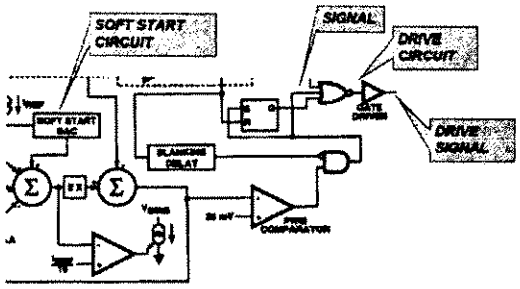
U.S. Patent No. 6,229,366	Keller
	
a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load.	As shown in Figure 11, Keller teaches a second winding magnetically coupled to the first winding receiving a substantially DC signal from the power supply capacitor, the second terminal of the first winding coupled to the first terminal of the pulse width modulated switch. 

12. Claim 9

As established above, Keller anticipates Claim 1. Because Claim 9 contains substantially the same limitations as Claim 1, all limitations of Claim 9 are anticipated for the reasons provided above. As detailed in the table below, Keller discloses each and every limitation of Claim 9, and, accordingly anticipates Claim 9 under 35 U.S.C. §102(a) and (b).

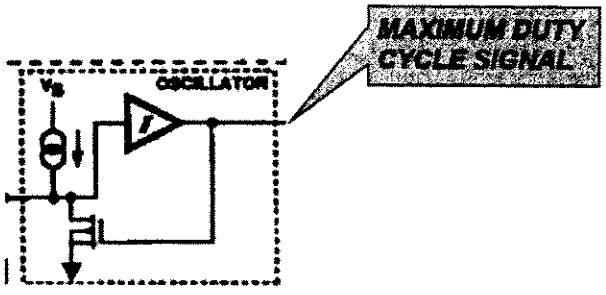
U.S. Patent No. 6,229,366	Keller
9. A regulation circuit comprising	
a first terminal;	As shown in Figures 1 and 11, Keller teaches a first terminal **(Drain) .** 
a second terminal;	As shown in Figures 1 and 11, Keller teaches a second terminal **(Source).** 
a switch comprising a control input, said switch allowing a signal to be transmitted between said first terminal and said second terminal according to a drive signal provided at said control input;	As shown in Figure 1, Keller teaches a switch comprising a control input, the switch allowing a signal to be transmitted between the first terminal (Drain) and the second terminal (Source) according to a drive signal provided at said control input.

U.S. Patent No. 6,229,366	Keller
	
a drive circuit that provides said drive signal for a maximum time period of a cycle; and	As shown in Figure 1, Keller teaches a drive circuit that provides the drive signal for a maximum time period of a cycle. 
a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said maximum time period.	As shown in Figure 1, Keller teaches a soft start circuit that provides a signal instructing the drive circuit to disable the drive signal during at least a portion of the on-state of the maximum duty cycle. "During power up the circuit has an optional soft start function." P. 510. "When soft start is enabled the maximum output switch current is programmed linearly increasing from zero to maximum in 4096 power supply equivalent clock cycles." P. 510.

U.S. Patent No. 6,229,366	Keller
	

13. Claim 10

As established above, Keller anticipates Claim 9. As Claim 10 depends on Claim 9, it is established that all limitations of Claim 9 incorporated into Claim 10 are anticipated. As detailed in the table below, Keller discloses each and every limitation of Claim 10, so Keller anticipates Claim 10 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	Keller
10. The regulation circuit of claim 9 further comprising an oscillator that provides a maximum duty cycle signal to said drive circuit, said maximum duty cycle signal comprising an on-state for said maximum time period.	As shown in Figure 1, Keller teaches an oscillator that provides a maximum duty cycle signal to the drive circuit, the maximum duty cycle signal comprising an on-state for the maximum time period. *See* p. 508 ("The maximum duty cycle is user programmable."); *see also*, p. 509. 

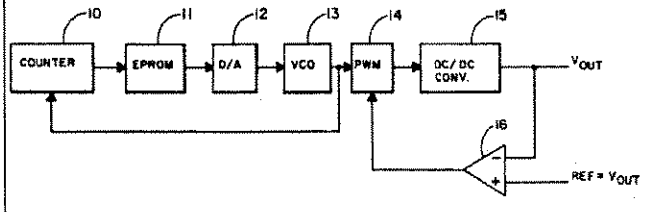
14. Claim 14

Claim 14 is rendered obvious by Keller in combination with Martin, and also by Keller in combination with Wang.

a. Keller in combination with Martin renders Claim 14 obvious under 35 U.S.C. §103.

Keller discloses a pulse width modulated MOSFET switch with soft-start functionality. It does not, however, disclose a frequency variation circuit for producing a frequency variation signal. Martin discloses a frequency variation circuit for producing a frequency variation signal. Martin uses the same components as Keller-i.e., a counter, a digital-to-analog converter (DAC), and a voltage controlled oscillator (VCO), but to provide a frequency variation circuit. Both Keller and Martin are addressed to the same field of art--switching power supplies--and thus one of ordinary skill in the art would be motivated to combine the teachings of the two references and use the same components to generate a signal for use in both soft start and frequency variation.

As established above, Keller anticipates Claim 9. As Claim 14 depends on Claim 9, it is established that all limitations of Claim 9 incorporated into Claim 14 are anticipated. As detailed in the table below, Keller, in combination with Martin, discloses each and every limitation of Claim 14, so Keller and Martin render Claim 14 obvious under 35 U.S.C. §103.

U.S. Patent No. 6,229,366	Keller and Martin
14. The regulation circuit of claim 9 further comprising a frequency variation circuit that provides a frequency variation signal and wherein said maximum time period varies according to a magnitude of said frequency variation signal.	The Figure in Martin shows a frequency variation circuit that provides a frequency variation signal. In particular, counter 10, in combination with EPROM 11 and digital-to-analog (D/A) converter 12, constitute a frequency variation circuit, which provides an (analog) frequency variation signal applied to voltage controlled oscillator (VCO) 13.  "The **output signal from the VCO 13 is also fed back to counter 10** which can be any suitable counter of any prescribed length." '417 patent, 2:20-22 (emphasis added).

U.S. Patent No. 6,229,366	Keller and Martin
	"The output of the counter 10 is connected to the input of EPROM 11 which can be any suitable kind of storage device.... The contents of the PROM 11 are stored in digital form. These digital signals are supplied to the digital-to-analog converter 12. The D/A converter 12 supplies an analog signal to the VCO 13." '417 patent, 2:20-22 2:22-36. "Thus, as the output signal produced by VCO 13 varies in frequency, the counter 10 is caused to count at different rates. **With counter 10 counting at different rates** the EPROM 11 is stepped or addressed at different rates. The content of the PROM are ... a pseudo random code in digital form. **The digital signal from the PROM 11 is converted to an analog signal by D/A converter 12. This analog signal is then applied to VCO 13** which produces an oscillating signal which has a frequency which is representative of the amplitude of the analog signal." '417 patent, 2:20-22, 2:39-49 (emphasis added). Further, the frequency variation signal is cyclic because counter 10 and its associated output would repeat after counter 10 reaches its maximum value and re-sets. The frequency variation signal, transmitted by D/A converter 12 to VCO 13, is internal to the circuit disclosed by Martin. *See* Figure. The frequency variation signal will vary within a range predetermined by the range of the signal that is output by VCO 13 (which is fed back to counter 10, which counts at a certain rate). As shown in Figure 1, Keller teaches an oscillator that provides a maximum duty cycle signal to the drive circuit. *See* p. 508 ("The maximum duty cycle is user programmable."); *see also*, p. 509. When combined with Martin, the maximum time period would vary according to a magnitude of the frequency variation signal.

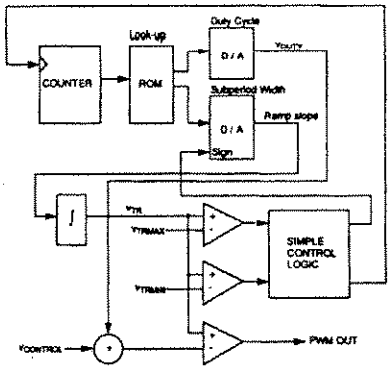
b. Keller in combination with Wang renders Claim 14 obvious under 35 U.S.C. §103.

Keller discloses a pulse width modulated MOSFET switch with soft-start functionality. It does not, however, disclose a frequency variation circuit for producing a frequency variation

signal. Wang discloses a frequency variation circuit for producing a frequency variation signal. Wang even uses the same components as Keller-i.e., a counter, a digital-to-analog converter (DAC), and a voltage controlled oscillator (VCO), but to provide a frequency variation circuit. Both Keller and Wang are addressed to the same field of art--switching power supplies--and thus one of ordinary skill in the art would be motivated to combine the teachings of the two references and use the same components to generate a signal for use in both soft start and frequency variation.

As established above, Keller anticipates Claim 9. As Claim 14 depends on Claim 9, it is established that all limitations of Claim 9 incorporated into Claim 14 are anticipated. As detailed in the table below, Keller, in combination with Wang, discloses each and every limitation of Claim 14, so Keller and Wang render Claim 14 obvious under 35 U.S.C. §103.

U.S. Patent No. 6,229,366	Keller and Wang
14. The regulation circuit of claim 9 further comprising a frequency variation circuit that provides a frequency variation signal and wherein said maximum time period varies according to a magnitude of said frequency variation signal.	Wang discloses each of the limitations of Claim 1 as described in the section that addresses the Wang reference alone. An abbreviated description is provided below. Wang discloses a counter, a ROM, and a digital to analog (D/A) converter, which together act as a frequency variation circuit, which provides an (analog) frequency variation signal applied to a voltage controlled oscillator. The oscillator generates a signal having a switching frequency ("PWM OUT") and having a control input ("Ramp slope") for varying the switching frequency. And, it shows a counter (COUNTER) coupled to the output of the oscillator and (through the ROM element) to the digital to analog converter (D/A), the counter causing the digital to analog converter to adjust the control input and to vary the switching frequency.

U.S. Patent No. 6,229,366	Keller and Wang
	 Fig. 20. Programmed PWM generator implementation with control input. The oscillator is comprised of the signal integrator, the two comparators, and the control logic depicted in Figure 20. While Keller does not disclose a frequency variation circuit, it does disclose the use of a counter, a digital-to-analog converter (DAC), and a voltage controlled oscillator (VCO) to produce a soft-start circuit. A person of ordinary skill in the art, when considering Keller, would be motivated to combine the teachings of Keller with the teachings of Wang because they are both from the same field of endeavor--switching power supplies.

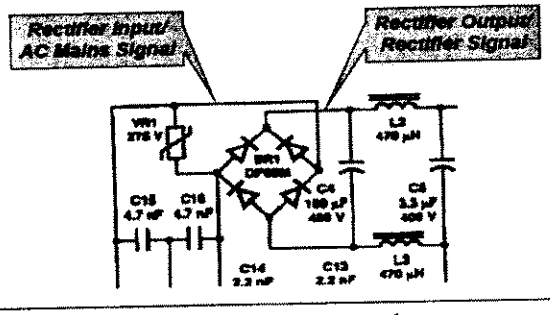
15. Claim 16

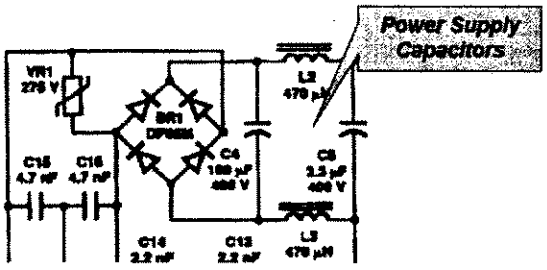
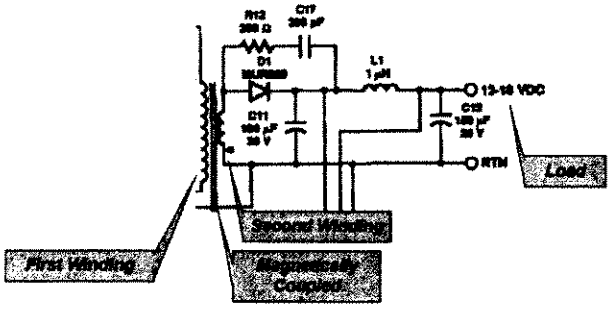
As established above, Keller anticipates Claim 9. Because Claim 16 depends on Claim 9, all limitations of Claim 9 incorporated into Claim 16 are anticipated. As detailed in the table below, Keller discloses each and every limitation of Claim 16 and; accordingly, anticipates Claim 16 under 35 U.S.C. §102(a) and (b). Furthermore, Claim 16 is invalid under 35 U.S.C. §112 ¶ 1 as indefinite for failing to particularly point out the claimed invention. The term "oscillator" lacks proper antecedent basis.

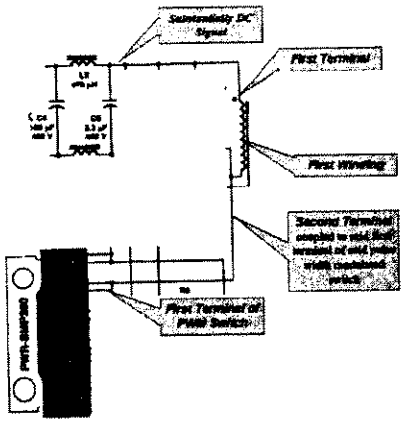
U.S. Patent No. 6,229,366	Keller
16. The regulation circuit of claim 9 wherein said first terminal, said second terminal, said oscillator and said soft start circuit comprise a monolithic device.	As shown in Figures 1 and 11, Keller teaches that the first terminal, second terminal, switch, oscillator, drive circuit and soft start circuit comprise a monolithic device. *See also* Abstract, p. 505 (describing integration of control circuits with MOSFET switch).

16. Claim 18

As established above, Keller anticipates Claim 9. Because Claim 18 depends on Claim 9, all limitations of Claim 9 incorporated into Claim 18 are anticipated. As detailed in the table below, Keller discloses each and every limitation of Claim 18 and; accordingly, anticipates Claim 18 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	Keller
18. The regulation circuit of claim 9 further comprising	As shown in Figures 1 and 2, Keller teaches a current limit circuit that provides a signal instructing the drive circuit to discontinue the drive signal when a current received at the first terminal of the regulation circuit is above a threshold level. *See also*, p. 510 ("Protection features include input under voltage lockout, over temperature fault, output under voltage fault and output over current protection consistent with cycle by cycle peak limiting of the switch current.").
a rectifier input and a rectifier output, said rectifier input receiving an AC mains signal and said rectifier output providing a rectifier signal;	As shown in Figure 11, Keller teaches a rectifier (BR1) input and a rectifier output, the rectifier input receiving an AC mains signal and the rectifier output providing a rectifier signal. 
a power supply capacitor that receives said rectified signal;	As shown in Figure 11, Keller teaches a power supply capacitor (C4 and/or C5) that receives said

U.S. Patent No. 6,229,366	Keller
	rectified signal. 
a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said regulation circuit; and	As shown in Figure 11, Keller teaches a first winding comprising a first terminal and a second terminal, the winding receiving a substantially DC signal from the power supply capacitor, the second terminal of said first winding coupled to the first terminal of said pulse width modulated switch. 
a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load.	As shown in Figure 11, Keller teaches a first winding comprising a first terminal and a second terminal, the first winding receiving a substantially DC signal from the power supply capacitor, the second terminal of the first winding coupled to the first terminal of the pulse width modulated switch.

U.S. Patent No. 6,229,366	Keller
	

C. UNITRODE APPLICATION NOTE U-133 ANTICIPATES CLAIMS 1, 2, 8, 9, 10, 16, and 18 OF THE '366 PATENT

The U-133 Application Note anticipates Claims 1, 2, 8, 9, 10, 16, and 18 of the '366 patent. 35 U.S.C. §102(a) and (b).

The U-133 Application Note describes Unitrode UCC 3800 series controller microchips for use in power supplies. **Ref. CE,** U-133 Application Note, at 9-344. The U-133 Application Note provides numerous reference designs for a pulse width modulation switch utilizing the UCC 3800 series controller with an external MOSFET switch, similar to the PWM controller shown in Figure 2 of the '366 patent that is used in conjunction with switch 435.

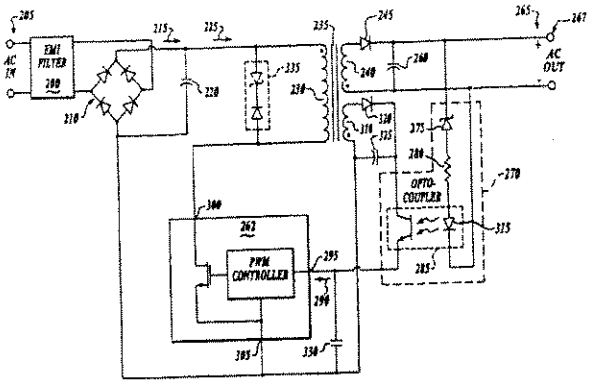


Figure 2, '366 Patent

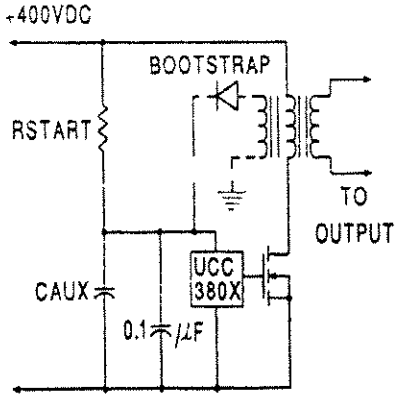


Figure 2, the U-133 App. Note

The U-133 Application Note includes all the elements of Claim 1 of the '366 patent. For example, Figure 2 of the U-133 Application Note teaches a PWM switch comprising a first terminal, and a second terminal, as seen above. Figure 1 of the U-133 Application Note teaches the remaining elements including a soft-start circuit, oscillator, and drive circuit as shown below and emphasized by dashed-lined boxes:

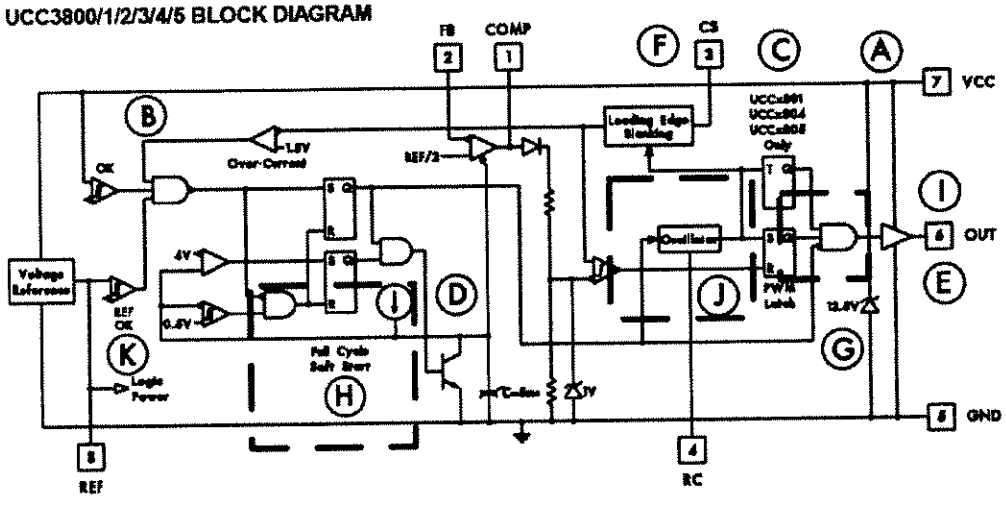


Figure 1.

The UCC3800 series controllers include fully internal soft-start circuits by using a ramp voltage generated by charging an internal capacitor with a current source to establish a gradual lengthening of switch conduction time during initial startup. *See i.e.*, **Ref. CE**, U-133 Application Note, at 9-352. The soft-start element of the UCC3800 series controller is illustrated in Figures 3, 6, and 9 of the '366 patent in the same way.

Figure 23 of the U-133 Application Note illustrates the gradual lengthening of switch conduction angle during soft-start in the same way illustrated in Figure 4 of the '366 patent. The ramp waveform is generated by a current source charging an internal (on-chip) capacitor. **Ref. CE**, U-133 Application Note, at 9-352; and as shown in Figures 1, 20, and 22 of the U- 133 Application Note.

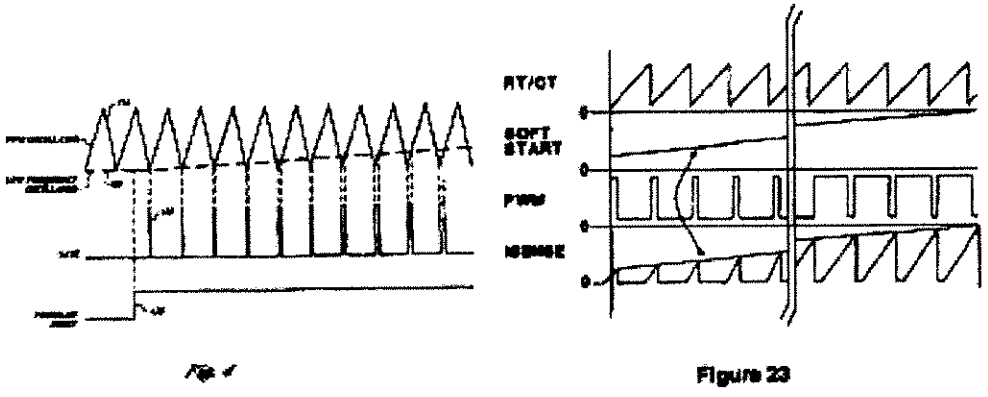


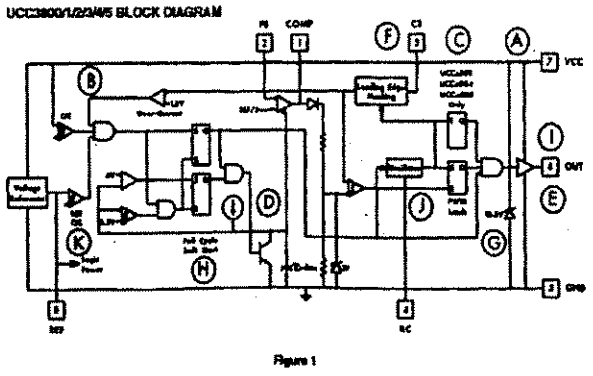
Figure 1 '366 Patent (left); Unitrode U-133 App Note (right)

The U-133 Application Note also describes circuitry for providing a maximum duty cycle signal from an oscillator. It specifies a Maximum Duty Cycle of 50% for the UCC3801, 3804, and 3805. **Ref. CE**, U-133 Application Note, at 9-344. For the UCC3801, 3804, and 3805 products, the D_{max} signal is created by a type-T flip-flop, toggled by the PWM oscillator, and output on the Q terminal of the T-flop. The D_{max} signal enables an AND gate, through which the PWM signal drives the MOS power switch. *See* **Ref. CE**, U-133 Application Note, Figure 1. This is the same structure described in Figures 3, 6, and 9 of the '366 patent.

The U-133 Application Note anticipates Claims 1, 2, 8, 9, 10, 16, and 18 of the '366 patent under 35 U.S.C. §102(a) and (b). As detailed in the table below, U-133 Application Note discloses each and every limitation of Claims 1, 2, 8, 9, 10, 16, and 18.

17. Claim 1

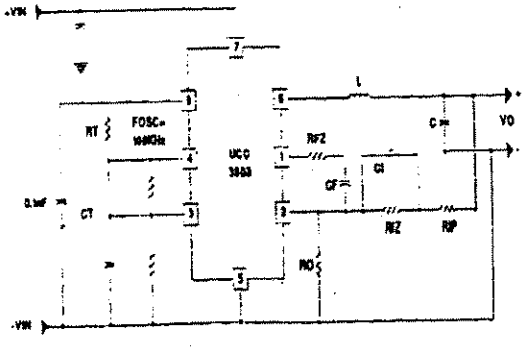
Claim 1 is an independent claim that the U-133 Application Note anticipates. As detailed in the table below, the U-133 Application Note discloses each and every limitation of Claim 1 anticipating Claim 1 under 35 U.S.C. §102 (a) and (b).

U.S. Patent No. 6,229,366	The U-133 Disclosure
1. A pulse width modulated switch comprising	Fig. 1 of the U-133 application note shows a PWM controller IC, used with an outboard MOSFET switch as in Fig 28, 29, 30, 31, and 32. **Ref. CE**, U-133 Application Note, at Figure 1. 
a first terminal;	The MOSFET shown in Figure 1 has a drain terminal. **Ref. CE**, U-133 Application Note, at Figure 1.
a second terminal;	The MOSFET has a source terminal. **Ref. CE**, U-133 Application Note, at Figure 1.
a switch comprising a control input, the switch allowing a signal to be transmitted between said first terminal and said second terminal according to a drive signal provided at said control input;	The MOSFET has a gate terminal that controls conduction from drain to source. **Ref. CE**, U-133 Application Note, at Figure 1.
an oscillator that provides a maximum duty cycle signal comprising an on-state and an off-state;	The oscillator illustrated in Figure 1 has a maximum duty cycle whose signal is created by the flip-flop toggled by the sawtooth waveform tripping thresholds at 2.65V and 0.2V. **Ref. CE**, U-133 Application Note, at Figure 1; 9-348; and

U.S. Patent No. 6,229,366	The U-133 Disclosure
	9-349. For the UCC3801, -04, and -05 types there is a maximum duty cycle signal generated by the type-T flip-flop shown in Fig 1, and further described in the corresponding datasheets.
a drive circuit that provides said drive signal according to said maximum duty cycle signal; and	The drive circuit is shown in Fig 1, and consists at least of the SR flip-flop, and AND gate, and output terminal. The oscillator illustrated in Figure 1, provides a maximum duty cycle signal to an AND gate that provides the drive signal. **Ref. CE**, U-133 Application Note, at Figure 1.
a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle.	The soft start circuit slowly raises the switch peak current each PWM cycle, forcing a controlled start-up. **Ref. CE**, U-133 Application Note, at Figure 1; 9-352.

18. Claim 2

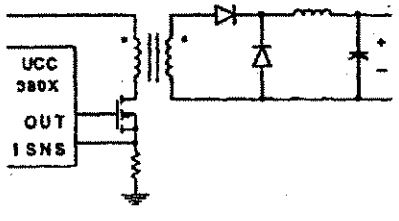
Dependent Claim 2 adds to Claim 1 the limitation that the device of Claim 1 is a monolithic device. As established above, the U-133 Application Note anticipates Claim 1. Because Claim 2 depends on Claim 1, all limitations of Claim 1 incorporated into Claim 2 are anticipated. As detailed in the table below, the U-133 Application Note discloses each and every limitation of Claim 2 and; accordingly, anticipates Claim 2 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	The U-133 Disclosure
2. The pulse width modulated switch of claim 1 wherein said a first terminal, said second terminal, said switch, said oscillator, said drive circuit and said soft start circuit comprise a monolithic device.	Fig. 27 shows the UCC3803 in a buck converter with monolithic switch, oscillator, drive circuit, and soft-start circuit in a monolithic device. **Ref. CE**, U-133 Application Note, at Figure 27.  Figure 27

U.S. Patent No. 6,229,366	The U-133 Disclosure

19. Claim 8

Dependent Claim 8 adds to Claim 1 a line-powered unregulated DC supply, and a transformer whose primary is powered by the DC and switched by the switch element of Claim 1, and whose secondary can be coupled to a load. As established above, the U-133 Application Note anticipates Claim 1. Because Claim 8 depends on Claim 1, all limitations of Claim 1 incorporated into Claim 8 are anticipated. As detailed in the table below, the U-133 Application Note discloses each and every limitation of Claim 8 and; accordingly anticipates Claim 2 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	The U-133 Disclosure
8. The pulse width modulated switch of claim 1 further comprising	
a rectifier comprising a rectifier input and a rectifier output, said rectifier input receiving an AC mains signal and said rectifier output providing a rectifier signal;	Off-line applications are transformerless rectified and filtered AC line input. **Ref. CE**, U-133 Application Note, at 9-358.
a power supply capacitor that receives said rectified signal;	Off-line applications are transformerless rectified and filtered AC line input. **Ref. CE**, U-133 Application Note, at 9-358.
a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said pulse width modulated switch; and	The U-133 Application Note describes a rectifier having a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said pulse width modulated switch. **Ref. CE**, U-133 Application Note, Fig. 31.  Figure 31

U.S. Patent No. 6,229,366	The U-133 Disclosure
a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load.	The U-133 Application Note describes a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load. **Ref. CE**, U-133 Application Note, Fig. 31.

20. Claim 9

As established above, the U-133 Application Note anticipates Claim 1. Because Claim 9 contains substantially the same limitations as Claim 1, all limitations of Claim 9 are anticipated for the reasons provided above. As detailed in the table below, the U-133 Application Note discloses each and every limitation of Claim 9, and, accordingly anticipates Claim 9 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	The U-133 Disclosure
9. A regulation circuit comprising	Figure 1 shows a PMW controller IC, used with an outboard MOSFET switch as in Figures 28-32. It is used without external switch in Figure 27. Pin 2 is the feedback terminal, used to regulate and output voltage as shown in Figures 27-30.
a first terminal;	The MOFSETs have a drain terminal. **Ref. CE**, U-133 Application Note, Fig. 1.
a second terminal;	The MOFETS have a source terminal. **Ref. CE**, U-133 Application Note, Fig. 1.
a switch comprising a control input, said switch allowing a signal to be transmitted between said first terminal and said second terminal according to a drive signal provided at said control input;	The MOFETS have a gate terminal that controls conduction from drain to source. **Ref. CE**, U-133 Application Note, Fig. 1.
a drive circuit that provides said drive signal for a maximum time period of a cycle; and	The U-133 Application Note includes an oscillator that has a maximum duty cycle, whose signal is created by the flip-flop toggled by the sawtooth waveform tipping thresholds at 2.65v and 0.2 v. **Ref. CE**, U-133 Application Note, 9-348 and 9-349, For the UCC3801, 3804, and 3805 types there is a

U.S. Patent No. 6,229,366	The U-133 Disclosure
	maximum duty cycle signal generated by the type-T flip-flop shown in Fig.1, and further described in the corresponding datasheets. **Ref. CE**, U-133 Application Note, Fig. 1.
a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said maximum time period.	The soft start circuit slowly raises the switch peak current each PWM cycle, forcing a controlled start-up. **Ref. CE**, U-133 Application Note, at Figure 1; 9-352.

21. Claim 10

As established above, the U-133 Application Note anticipates Claim 9. As Claim 10 depends on Claim 9, it is established that all limitations of Claim 9 incorporated into Claim 10 are anticipated. As detailed in the table below, the U-133 Application Note discloses each and every limitation of Claim 10, so the U-133 Application Note anticipates Claim 10 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	The U-133 Disclosure
10. The regulation circuit of claim 9 further comprising an oscillator that provides a maximum duty cycle signal to said drive circuit, said maximum duty cycle signal comprising an on-state for said maximum time period.	The U-133 Application Note includes an oscillator that has a maximum duty cycle, whose signal is created by the flip-flop toggled by the sawtooth waveform tipping thresholds at 2.65v and 0.2 v. **Ref. CE**, U-133 Application Note, 9-348 and 9-349, For the UCC3801, 3804, and 3805 types there is a maximum duty cycle signal generated by the type-T flip-flop shown in Fig.1, and further described in the corresponding datasheets. **Ref. CE**, U-133 Application Note, Fig. 1.

22. Claim 16

As established above, the U-133 Application Note anticipates Claim 9. Because Claim 14 depends on Claim 9, all limitations of Claim 9 incorporated into Claim 16 are anticipated. As detailed in the table below, the U-133 Application Note discloses each and every limitation of Claim 16 and; accordingly, anticipates Claim 16 under 35 U.S.C. §102(a) and (b). Furthermore,

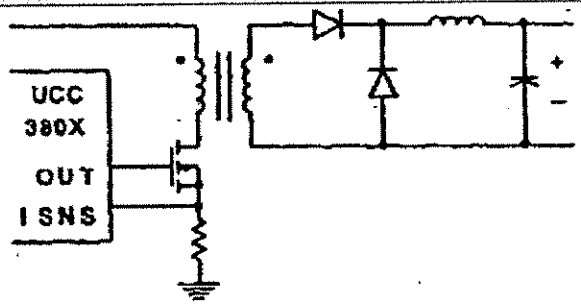
Claim 16 is invalid under 35 U.S.C. §112 ¶ 1 as indefinite for failing to particularly point out the claimed invention. The term "oscillator" lacks proper antecedent basis.

U.S. Patent No. 6,229,366	The U-133 Disclosure
16. The regulation circuit of claim 9 wherein said first terminal, said second terminal, said oscillator and said soft start circuit comprise a monolithic device.	Fig. 27 shows the UCC3803 in a buck converter with a monolithic switch, oscillator, drive circuit, and softstart circuit. **Ref. CE**, U-133 Application Note, Fig. 27.

23. Claim 18

As established above, the U-133 Application Note anticipates Claim 9. Because Claim 18 depends on Claim 9, all limitations of Claim 9 incorporated into Claim 18 are anticipated. As detailed in the table below, the U-133 Application Note discloses each and every limitation of Claim 18 and; accordingly, anticipates Claim 18 under 35 U.S.C. §102(a) and (b).

U.S. Patent No. 6,229,366	The U-133 Disclosure
18. The regulation circuit of claim 9 further comprising a rectifier comprising	
a rectifier input and a rectifier output, said rectifier input receiving an AC mains signal and said rectifier output providing a rectifier signal;	Off-line applications are transformerless rectified and filtered AC line input. **Ref. CE**, U-133 Application Note, at 9-358.
a power supply capacitor that receives said rectified signal;	Off-line applications are transformerless rectified and filtered AC line input. **Ref. CE**, U-133 Application Note, at 9-358.
a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said regulation circuit; and	The U-133 Application Note describes a transformer having a first winding comprising a first terminal and a second terminal, said first winding receiving a substantially DC signal from said power supply capacitor, said second terminal of said first winding coupled to said first terminal of said pulse width modulated switch. **Ref. CE**, U-133 Application Note, Fig. 31.

U.S. Patent No. 6,229,366	The U-133 Disclosure
	 Figure 31
a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load.	The U-133 Application Note describes a transformer having a second winding magnetically coupled to said first winding, said first winding capable of being coupled to a load **Ref. CE**, U-133 Application Note, Fig. 31.

V. CONSTRUCTION OF CLAIM TERMS IN THE '366 PATENT

The '366 patent and three other patents are currently the subject of litigation in the United States District Court for the District of Delaware (Civil Action No. 04-1371-JJF). This action was filed by the assignee of the '366 patent, Power Integrations, Inc., against Fairchild. The parties have set forth their respective positions as to how certain limitations of the referenced claims of the '876 patent should be construed in claim construction briefs. The Court has considered those positions and issued a Claim Construction Order. A copy of the Claim Construction Order is attached at **Exhibit E**. A copy of the Court's associated Memorandum Opinion is attached at **Exhibit F**.

A. The Court's Constructions are not Binding on the Patent Office

For purposes of examination, including reexamination, the terms of the patent claims must be interpreted. During examination, claims are to be given their "broadest reasonable interpretation." MPEP §2111 (citing *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). The

interpretation must be consistent with the understanding of those of ordinary skill in the relevant art. MPEP, §2111 (citing *In re Cortright*, 165 F.3d 1353, 1359 (Fed. Cir. 1999)).

Because of the different standards employed by the district courts and the Patent Office in construing claims, the Delaware District Court's constructions are in no way binding on the Patent Office. *See* MPEP §2286 and *In re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1989) (manner of claim interpretation that is used by courts in litigation is not the manner of claim interpretation that is applicable during prosecution of a pending application before the PTO). Accordingly, the Examiner is not bound by the Court's Claim Construction Order.

B. Construction of Specific Terms From the Claims of the '366 Patent

The construction of three limitations of the referenced claims of the '366 patent are important in evaluating the invalidity of the claims at issue: "soft-start circuit" and "frequency variation signal" and "frequency variation circuit." "Frequency variation circuit" was construed as "a structure that provides the frequency variation signal" and thus will be considered in the context of that limitation.

a. "soft-start circuit"

Independent Claims 1 and 9 expressly include the term "soft-start circuit," and the remaining claims include this term through dependency. It is submitted that the broadest reasonable interpretation (as required by MPEP §2111) of the term "soft-start circuit" is "a circuit that minimizes inrush currents at start up." *See Phillips v. AWH Corporation*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) ("Our cases recognize that the specification may reveal a special definition given to a Claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs."). The specification of the '366 patent states that "soft start functionality is termed to be a functionality that reduces the inrush currents at start up." **Ex. A,** '366 patent, 2:66-67.

The Court's narrower construction improperly reads in limitations from the preferred

embodiments, and should not be applied on reexamination. *See In re Yujiro Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984) (Claims subject to reexamination will "be given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not be read into the Claims.") The Court construed "soft-start circuit" as a means-plus-function element. The Court did not, however, expressly identify the disclosed structures but rather broadly referred to sections of the file history and the entirety of Figures 3, 6, and 9. The Court's construction under 35 U.S.C. §112, ¶6 is much narrower than MPEP §2111 requires, and is improper under Federal Circuit case law as well.

To begin, since the "soft start circuit" element is not written with "means for" language, it is presumed not to be a means-plus-function element. "The presumption flowing from the absence of the term 'means' is a strong one that is not readily overcome." *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354 (Fed. Cir. 2004). Here, it is even more difficult because the Federal Circuit has held that § 112, ¶ 6 should not typically apply to elements coupling the term "circuit" with an appropriate identifier or a description of the circuit's operation. *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371-72 (Fed. Cir. 2003)("The term 'circuit' with an appropriate identifier such as 'interface,' 'programming' and 'logic,' certainly identifies some structural meaning to one of ordinary skill in the art."); *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1320 (Fed. Cir. 2004) ("Thus, when the structure-connoting term 'circuit' is coupled with a description of the circuit's operation, sufficient structural meaning generally will be conveyed to persons of ordinary skill in the art, and §112 ¶ 6 presumptively will not apply.") Accordingly, for the purpose of reexamination, the Court's construction of "soft start circuit" as means plus function should not be followed.

b. "frequency variation signal"

Dependent Claim 14 includes the term "frequency variation signal." The broadest reasonable interpretation (as required by MPEP §2111) of the term "frequency variation signal" is "a signal that is used to vary the frequency of the oscillation signal." *See Phillips*, 415 F.3d at 1316. This construction is consistent with the claims of both the '366 patent and the '851 patent.

For example, a limitation in claims 1 and 11 of the '851 patent describes:

> an oscillator that provides an oscillation signal having a frequency range, said frequency of said oscillation signal varying within said frequency range according to said frequency variation signal....

Ex. C, '851 patent, Claims 1 and 11; *see also* **Ex. A**, '366 patent, Claim 4 and 16. (emphasis added)

This construction is also consistent with the specifications of the '366 patent. Applicants describe a prior art frequency variation circuit (140) and frequency variation signal (135). **Ex. A**, '366 patent, 3:18-39. Applicants state that the pulse width modulated switch of the invention "also comprises a frequency variation circuit that provides a frequency variation signal and an oscillator that provides an oscillation signal having a frequency that varies within a frequency range according to the frequency variation signal." **Ex. A**, '366 patent, 3:53-58.

The Court construes "frequency variation signal" more narrowly, as:

> "an internal signal that cyclically varies in magnitude during a fixed period of time and is used to modulate the frequency of the oscillation signal within a predetermined frequency range."

This construction of "frequency variation signal" improperly imports three limitations from the preferred embodiments described in the specification of the '366 patent. *See Resonate, Inc. v. Alteon Websystems, Inc.*, 338 F.3d 1360 (Fed. Cir. 2003)(a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.) In particular, the Court's construction incorrectly requires that the signal 1) be internal, 2) vary cyclically in magnitude during a fixed period of time, and 3) be used to modulate the frequency of the oscillation signal within a predetermined frequency range.

The Court's additional limitation that the frequency variation signal be "an internal signal." The "internal" limitation is contradicted by the '851 Patent's prosecution history (which applies equally to the '366 patent). During prosecution, in rejecting the claims as anticipated under §102(b) by Prior Art Figure 1, the Examiner relied on an external resistor 140 as the frequency variation circuit for generating external frequency variation signal 135. *See* **Ex. D**, '851 history, 12/13/99 Office Action at p. 4, ¶ 5. Applicants did not dispute the Examiner's reliance on external

frequency variation circuits and signals. **Ex. D,** '851 history, 3/10/00 Amendment and Response at pp. 3, 6. Applicant's subsequent position during litigation apparently was induced by the realization that the claims as written were invalid unless additional limitations were read into the claims.

The Court's requirement that the frequency variation signal "cyclically var[y] in magnitude during a fixed period of time" is improperly narrow. To begin the frequency variation signal 135 relied upon by the examiner was not cyclic. This limitation also conflicts with the specification of the '366 patent, where applicants state that the frequency variation signal can be any signal (including non-cyclic signals) that "vary in magnitude during a fixed period of time." *See* **Ex. A**, '366 patent, 6:47-48. Further, under the doctrine of claim differentiation, the term "frequency variation signal" cannot be limited to a signal that cyclically varies in magnitude during a fixed period of time because that limitation was added to dependant Claims 3 and 12. Claim 3 includes the limitation of "a frequency variation signal that varies cyclically in magnitude during a fixed period of time." **Ex. C,** '851 patent, *compare* Claims 1 and 11 with Claims 3 and 12. For these dependant claims to have meaning (and a more limited scope than the independent Claims 1 and 11), the broader independent claim cannot be interpreted to require a frequency variation signal that varies cyclically in a fixed time period. *See Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999).

The Court's requirement that the frequency variation signal be "used to modulate the frequency of the oscillation signal within a predetermined frequency range" is overly narrow. **Ex. F**, Court's Claim Construction Opinion, at 34. The specification of the '366 patent makes clear that the frequency variation signal varies the frequency of the oscillation signal in any fashion – including varying the frequency in a range that is not "predetermined." "The jitter current **135** is used to vary the frequency of the saw-toothed waveform generated by the oscillator contained in the pulse width modulated switch **90**." **Ex. A**, '366 patent, 3:23-26. Accordingly, the term "frequency variation signal" is best construed as "a signal that is used to vary the frequency of the oscillation signal."

VI. Statement of Compliance With 37 C.F.R. § 1.510(b)(5)

Fairchild certifies that, pursuant to 37 C.F.R. 1.510(b)(5), it has served a copy of this request by mailing such copy Express Mail postage prepaid to the attorney of record for the patentee at the following address, which is the current address obtained from the PTO attorney database:

BLAKELEY, SOKOLOFF, TAYLOR, ZAFMAN LLP.
12400 Wilshire Boulevard, Seventh Floor
Los Angeles, CA 90025

A courtesy copy of this request was also served on litigation counsel for Power Integrations by mailing such copy Express Mail postage prepaid to the following address:

Frank E. Scherkenbach
FISH & RICHARDSON, P.C.
225 Franklin Street
Boston, MA 02110-2804

VII. Conclusion

The Requestor believes that the above analysis indicates that the prior art attached to PTO Form 1449 as References CA to CE, which were not considered previously by the Examiner, invalidate Claims 1, 2, 8, 9, 10, 14, 16, and 18 of the '366 Patent under 35 U.S.C. § 102 and/or § 103. At a minimum, it is believed that the cited art raises a substantial new question of patentability, thereby justifying commencement of an *ex parte* reexamination proceeding. Accordingly, the Requestor respectfully requests that the Commissioner establish a reexamination proceeding and give due consideration to the prior art and admissions discussed above.

Dated: November 9, 2006

Respectfully submitted,

Sanjeet Dutta

Sanjeet K. Dutta
Reg. No. 46,145

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VIA FACSIMILE & U.S. MAIL
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February 5, 2007

Gabriel M. Ramsey
Orrick, Herrington & Sutcliffe LLP
1000 Marsh Road
Menlo Park, CA 94025

Re: Power Integrations Inc. v. Fairchild Semiconductor Int'l
USDC-D. Del. - C.A. No. 04-1371-JJF

Dear Gabe:

I am writing with respect to Fairchild's June 6, 2006 opinion letter regarding Power Integrations' '366 patent, produced at FCS1693053-57, and marked, discussed, and admitted during the October trial as DX483 ("the '366 opinion letter"). The '366 opinion letter is marked HIGHLY CONFIDENTIAL under the protective order entered in this case, but I am writing to ask that Fairchild de-designate the '366 opinion letter so that Power Integrations can submit the letter to the Patent and Trademark Office during the reexamination of the '366 patent.

As you are no doubt aware, Fairchild requested that the patent office reexamine the '366 patent, and the patent office has granted the request. Fairchild's request for reexamination of the '366 patent gives rise to an obligation that Power Integrations disclose all known information that may be material to patentability. Power Integrations believes Fairchild's attorney analysis of the same prior art that Fairchild relied on to request reexamination is material and that Power Integrations should be permitted to provide those contrary remarks by Fairchild's counsel to the patent office as part of the reexamination process, particularly given that the '366 opinion letter was discussed in detail and shown in open court at trial. In light of the open discussion of the letter at trial, there no longer appears to be anything confidential in the letter, so please let us know if Fairchild will de-designate the '366 opinion letter. Should Fairchild refuse, Power Integrations will seek the Court's assistance to get relief from the protective order so the letter may be provided to the patent office.

I look forward to your response.

Sincerely,

Michael R. Headley

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Date February 5, 2007

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From Michael R. Headley

Re Power Integrations, Inc. v. Fairchild Semiconductor International
USDC-D. Del. – C.A. No. 04-1371 JJF

Number of pages including this page 2

Message

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February 7, 2007

VIA FACSIMILE

Michael R. Headley
Fish & Richardson P.C.
500 Arguello Street, Suite 500
Redwood City, CA 94036

Re: Power Integrations v. Fairchild Semiconductor et al. (CA 04-1371 JJF)

Dear Michael:

I write in response to your February 5, 2007 letter to Gabe Ramsey regarding Fairchild's highly confidential trial exhibit DX483. This document, an opinion letter provided to Fairchild by Fairchild's counsel, was properly designated by the parties as "HIGHLY CONFIDENTIAL." Fairchild cannot agree to de-designate this document.

You have indicated that Power Integrations wants to produce this highly confidential document to the Patent Office. As you know, documents produced in this litigation are to be used only for purposes of the litigation. *See*, Protective Order, Paragraph 2. As such, it is inappropriate for Power Integrations to use this document for purposes outside of the litigation.

Moreover, Fairchild's opinion letter is entirely irrelevant to Power Integrations' obligation to disclose information to the PTO. Power Integrations' obligation is met by disclosing relevant art of which it is aware. This does not extend to opinion letters of adverse parties obtained during litigation. There is therefore no need, or relevance, for Power Integrations to disclose this document.

Sincerely,

B. VanderZanden

Brian H. VanderZanden

cc: William J. Marsden, Jr.
Howard G. Pollack

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DATE February 7, 2007

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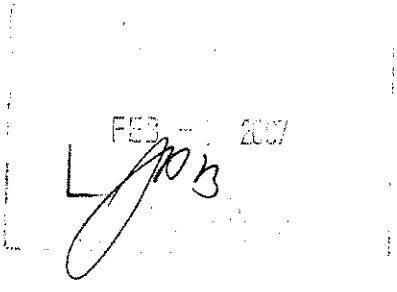
William J. Marsden, Jr.	FISH & RICHARDSON P.C.		(302) 652-0607

RE *Power Integrations v. Fairchild Semiconductor, et al.*

MESSAGE

Please see attached.



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February 16, 2007

Brian VanderZanden
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1000 Marsh Road
Menlo Park, CA 94025

Re: Power Integrations Inc. v. Fairchild Semiconductor Int'l
USDC-D. Del. - C.A. No. 04-1371-JJF

Dear Brian:

I received your letter of February 7 regarding Fairchild's June 6, 2006 opinion letter on Power Integrations' '366 patent and am disappointed to see that Fairchild will not de-designate the letter despite its affirmative use, open discussion, and admission into evidence at the recent trial of all 13 such opinion letters without any effort to clear the courtroom or to maintain the confidentiality of the documents. Your refusal to cooperate with our efforts to keep the Patent Office apprised of all relevant information with respect to Power Integrations' patents and the prior art is perplexing. Nevertheless, it is clear that we have reached an impasse on this point. If you will reconsider your position, please let us know by the close of business on Wednesday, February 21. If you maintain your refusal to cooperate, we will take the appropriate steps with the Court to obtain leave to provide the letter to the Patent Office despite Fairchild's designation.

Sincerely,

Michael R. Headley

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From Michael R. Headley

Re Power Integrations Inc. v. Fairchild Semiconductor International

Number of pages including this page 2

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February 21, 2007

VIA FACSIMILE

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Re: Power Integrations v. Fairchild Semiconductor et al. (CA 04-1371 JJF)

Dear Michael:

I write in response to your February 16, 2007 letter regarding Fairchild's highly confidential opinion letter. Fairchild's position has not changed: this document has been properly designated as "Highly Confidential," and Fairchild cannot agree to its de-designation.

Moreover, I disagree with your assertion that Fairchild is somehow refusing to cooperate with Power Integrations' "efforts to keep the Patent Office appraised of all relevant information with respect to Power Integrations' patents and the prior art." The Patent Office needs to be notified of prior art that is relevant to the claims of Power Integrations' patents, which has been done since this art was submitted as part of the request for reexamination. You have stated no reason as to why the Patent Office would need to be appraised of mere opinions concerning these references, let alone Fairchild's non-infringement positions.

I would further like to point out that Paragraph 9 of the Protective Order requires that documents remain designated until the Court determines that they should be de-designated. Please be careful to treat Fairchild's opinion letter as Highly Confidential until the Court is able to resolve this dispute.

Sincerely,

B. VanderZanden

Brian H. VanderZanden

cc: William J. Marsden, Jr.
Howard G. Pollack

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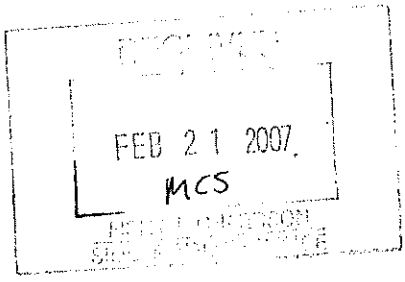

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